MP-5
ARMORERS
INSTRUCTION

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OBERNDORF
"The History of a Town"

His Majesty Friedrich I of Wurtemberg signed the foundation document for the royal weapon factory in Oberndorf on 31st July 1811. The factory was opened in 1812 and employed 133 workers.

1867 Wilhelm and Paul Mauser invented a novel bolt system for breechloaders. This weapon was introduced as the German infantry weapon M71 in 1871.

The royal weapon factory became Waffenfabrik Mauser AG in 1897.

At the beginning of the 20gth Century the factory was substantially expanded. A new infantry weapon, the model 98, was introduced.

1945, the end of World War II. The former royal weapon factory was dismantled by the French Occupying Forces. Edmund Heckler, Theodor Koch and Alex Seidel, former engineers of the Mauser-Werke, save what could be saved from the ruins and lay the foundation for Heckler & Koch.

HECKLER & KOCH
"The History"

1949: Edmund Heckler, Theodor Koch and Alex Seidel found an engineering office in the former air-raid protection of the Fire brigade warehouse. The product range: spare parts and single parts for household machines and bicycles.
1959: The newly founded Bundeswehr of the Federal Republic of Germany introduced the G3 of Heckler & Koch as the standard assault rifle. All German forces are equipped with the G3.
1966: Start of the serial production of the MP5. In the following years not only the German police and Special Forces are equipped with his weapon but also many other police forces abroad.
1974: Heckler & Koch gets an order from the Ministry of Defense of the Federal Republic of Germany to develop a weapon with a caseless ammunition technology.
1978: The serial production for the P7 is started; the pistol is introduced in several Federal States and with the Special Forces as well as in the Bundeswehr.
1990: The money of the defense household which is already attached to the pre serial production of the weapon system G11 with caseless ammunition is canceled.
1991: 600 employees of Heckler & Koch GmbH and Heckler & Koch Maschinenbau GmbH (Machine Tool Company) are laid off in the frame of a social plan procedure. The family-owned company Heckler & Koch is taken over by the British Company Royal Ordnance on March 6th. Royal Ordnance is an integrated part of the British Aerospace Group. This take-over is followed by the re-structuring of Heckler & Koch and the concentration of the core business, the defense technology.
1995: In July Heckler & Koch signed a contract with the Bundeswehr concerning the new Bundeswehr pistol. The serial production for this weapon starts in September. The P8 is delivered to the Air force, the Navy and the Army.
1996: Serial production of the new 5.56mm light weight assault rifle G36 will start in spring. First article tests were conducted in March. A carbine version of the G36 named G36 K was supplied for field tests to a Para-Gtl.

GENERAL INFORMATION

The MP5 submachine gun is a select=fire small arm, which is produced using the most modern and advanced manufacturing techniques and methods. It is chambered for the 9mm x 19 (Luger), .40 Smith & Wesson, or 10mm ammunition and is capable of semi or fully automatic fire from any position. The MP5 is blowback operated using a delayed roller locked bolt system. (*Instructor's note: RDB-Roller Delayed Blowback)*

The high degree of accuracy found in the MP5 family of submachine guns is due to a combination of many factors not found in other submachine guns. These include a stationary barrel, the fact that the MP5 fires from the closed bolt position like a rifle, and the recoil energy is symmetrically transmitted through the roller locked bolt system.

This roller locked bolt system also allows the weapon to be more easily controlled during fully automatic fire by spreading the recoil forces over a longer period of time thereby reducing the felt recoil to the shooter. It also offers absolute safety and reliability due to the closed bolt system.

The ammunition is fed from either a 15 or 30 (standard) round magazine.

The MP5 is capable of being fitted with a variety of accessories including buttstocks of different configurations as well as trigger groups, handguards, scope mounts, blank firing attachments, grenade launchers and much more.

The metal parts of the guns are phosphated then painted using an electrically charged painting technique. This provides the gun with a finish durable enough to last for years of normal use.

The component style design of this gun enables an armorer to easily maintain it with a minimum requirement of time and tools. As you will see Heckler & Koch has done everything possible to make your job easier.

EXTERIOR NOMENCLATURE

Muzzle	-	End of the barrel, location of the crown, threaded area on the Navy models.
Three Lugs	-	Locking lugs used to hold attachments.
Barrel	-	Pressed and pinned into the barrel extension with standard land and groove configuration/free floating.
Front Sight Holder	-	Pressed, glued and riveted to the barrel/holds the front sight and surrounds the cocking tube/cocking tube cap/front sling mount
Cocking Tube	-	Welded to the front of the receiver/houses the cocking handle and mechanism/handguard locking pin bracket.
Cocking Handle	-	Used to pull the bolt group to the rear.
Receiver	-	Formed and folded sheet metal, it houses all assembly groups.
Scope Mounts	-	On each MP5, it provides a location and structure for quick detachable scope mount.
Rear Sight	-	Diopter in design with four apertures for varying light conditions, it is adjustable with tool for windage and elevation.
Buttstock	-	Held to the receiver with locking pin (s), they come in fixed, retractable (old style metal back plate, new style polymer plate and Klausman style 1 ½ longer), butt cap, and folding. It is the position of the rear sling mount.
Trigger Group	-	Held to the receiver with locking pins and contains the safety selector.
Trigger Guard	-	Large for gloved hands.
Trigger	-	Inside the trigger guard. Pulling it with the weapon loaded and off safe will fire the gun.
Safety Selector	-	Located on the trigger housing with multiple positions; Safe-Semi-2 round burst – 3 round burst – Full Automatic. “Navy” selector is ambidextrous.
Magazine well	-	Located in front of the trigger group, it accepts either 15 or 30 round magazines and holds the center sling mount (on 9mm variants).
Magazine Release	-	Two position activation, button or paddle.
Ejection Port	-	Located on the right side of the receiver/case deflector in port.
Handguard	-	Fiberglass or polymer/slim line or tropical which is held in place by front locking pin.

SAFETY CHECK

A safety check must be performed when the condition of the gun is unknown, when you first pick up the gun and before you do anything to the gun that will result in the trigger being pulled with the bolt forward. NO ONE SHOULD DO THIS FOR YOU!!!

NO GUN IS SAFE UNTIL YOU HAVE CHECKED IT YOURSELF!

P – **P**oint the firearm in a safe direction

P – **P**ut the safety in the safe position

P – **P**ull the magazine from the firearm

P – **P**ull the bolt to the rear and lock it

P – **P**hysically and visually inspect the chamber

CLEARING PROCEDURE

There is only one major difference between a safety check and a clearing procedure. It is that during a safety check you are unaware of the condition of the firearm whereas with the clearing procedure you know the gun is loaded. If you are following the proper procedures, both the safety check and the clearing procedure should be handled the same way.

One important factor to consider in the clearing procedure is the disposition of the round as it is ejected. It is not recommended to cover the ejection port as the round is being ejected as unintentional discharges can occur. By the same token, be careful as to where the ejected round falls as the primer doesn't know if it is being hit by a firing in, a rock or a projection of metal on the gun.

MARKINGS ON THE MP5

1 Company Name – **HK**
1 Model – **MP5/MP5SD/MP5K/MP5SF/MP5-N/MP5-40/MP5-10**
1 Serial Number – **Prefix of letter or two digit weapon identifier**
1 Quality Control Stamp – **Eagle with a (N) for nitro cellulose**

2 Date Code:

A = 0	**F = 5**
B = 1	**G = 6**
C = 2	**H = 7**
D = 3	**I = 8**
E = 4	**K = 9**

J is reserved for Proof house and on HK parts
not required to be proof tested such as magazine housings.

1 Proof Mark – Six Proof Houses in Germany. **ULM is utilized by HK**

ULM Berlin Kiel Hannover Munich Koln

3 Caliber – **9mm x 19/.40 S&W/10mm**

4 Place of Manufacture – **Made in W Germany or Made in Germany**

4 Place of Import – **SACO, Arlington, VA** *(1970's)*
HK, Inc. Arlington, VA
HK, Inc. Chantilly, VA
HK, Inc. Sterling, VA

Legend
1 - Located on top of the receiver between scope mounts.
2 - Located on top of receiver between rear scope mount and rear sight.
3 - Located on the left side of the magazine well.
4 - Located on the right side of the magazine well.

BUYERS BEWARE! DO NOT BE FOOLED BY LOOK-ALIKES

There are a lot of look-alike products being sold today that are not produced by HK. There are also used MP-5s available that were not reconditioned by HK, GmbH or imported by HK, Inc.

Here are some important markings to look for: German export law required that “Made in West Germany” or “Made in W. Germany” appear on the firearm. This usually appears on the magazine well and reads:

Made in W. Germany
HK Inc.
Sterling, VA (older models may say Chantilly or Arlington, VA or indicate SACO as the importer)

HK weapons will also be stamped “HK-MP5” with our acceptance/proof marks. If the firearms say just “MP5” and do not state where it was made, you can be sure it is not a genuine HK product and it does not meet HK specifications and quality control requirements.

In regard to the used MP-5s currently being advertised for sale to departments only, these weapons will say “Made in Germany.” They were manufactured during 1970-1974. Design changes have been made since then.

Advertisements for these firearms state that they have been “factory reconditioned.” However, HK, GmbH did not do this work, and these weapons may not meet HK or GmbH’s specifications and quality control requirements.

Buyers must understand the following:

- HK’s warranty does not apply to these firearms.
- HK, Inc. will not repair these weapons.
- HK, Inc. will not supply parts or accessories for these weapons.
- If accessories or parts are obtained commercially for these weapons, *they may not fit properly.*

In order to obtain all of the benefits that Heckler & Koch Inc. offers, when purchasing new HK products, please insure that you are dealing with an authorized HK dealer or representative.

(Instructor’s note: Saudi, Mexico, Brazil, Greece, Portugal, Norway)

MAJOR VARIANTS TO THE MP5

A – (*950 RPM)*

SD – Schall Daempfer (Meaning Sound Damped) *(900 RPM)*

K – Kurz (Meaning Short) *(1100 RPM)*

(Instructor's note: 3 Families of the MP5 A,SD and K)

MP5A – Basic series submachine gun in 9mm x 19 introduced around 1965 with two new variations of the "A" in .40 S&W and 10mm introduced in 1993.

MP5A1 - Submachine Gun with Buttcap
MP5A1(NT) - Submachine Gun with Buttcap & Navy trigger group.
MP5A1(012) - Submachine Gun with Buttcap & 2nd only trigger group
MP5A1(0125) - Submachine Gun with Buttcap & 2nd & sustained fire trigger group
MP5A1(013) - Submachine Gun with Buttcap & 3rd only trigger group
MP5A1(0135) - Submachine Gun with Buttcap & 3rd & sustained fire trigger group
MP5A2 - Submachine Gun with fixed stock
MP5A2(NT) - Submachine Gun with fixed stock & Navy trigger group
MP5A2 (012) - Submachine Gun with fixed stock & 2nd only trigger group
MP5A2(0125) - Submachine Gun with fixed stock & 2nd & sustained fire trigger group
MP5A2(013) - Submachine Gun with fixed stock & 3rd only trigger group
MP5A2(0135) - Submachine Gun with fixed stock & 3rd & sustained fire trigger group
MP5A3 - Submachine Gun with retractable stock
MP5A3(NT) - Submachine Gun with retractable stock & Navy trigger group
MP5A3(012) - Submachine Gun with retractable stock & 2nd only trigger group
MP5A3(0125) - Submachine Gun with retractable stock & 2nd & sustained fire trigger group
MP5A3(013) - Submachine Gun with retractable stock & 3rd only trigger group
MP5A3(0135) - Submachine Gun with retractable stock & 3rd & sustained fire trigger group
MP5SFA2 - Single Fire Carbine/SMG with fixed stock
MP5SFA3 - Single Fire Carbine/SMG with retractable stock
MP5-N - SMG with retractable stock, Navy trigger, threaded muzzle, optional beta front sight, optional stainless steel suppressor
MP5/40 - SMG in caliber .40 S&W, bolt hold open feature, threaded muzzle
MP5/10 - SMG in 10mm, bolt hold open feature, threaded muzzle

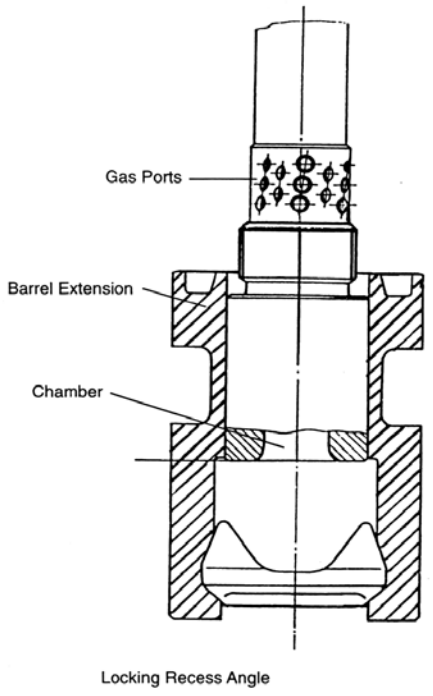
(Instructor's Note: A2 Solid, A3 Telescoping)

MP5SD – Second model introduced around 1970. The SD has an integral suppressor to reduce the velocity of standard ammunition to a subsonic level. It must not be fired without the suppressor.

MP5SD1 - Suppressed SMG with Buttcap
MP5SD1(NT) - Suppressed SMG with Buttcap & Navy trigger group.
MP5SD1(012) - Suppressed SMG with Buttcap & 2nd only trigger group
MP5SD1(0125) - Suppressed SMG with Buttcap & 2nd & sustained fire trigger group
MP5SD1(013) - Suppressed SMG with Buttcap & 3rd only trigger group
MP5SD1(0135) - Suppressed SMG with Buttcap & 3rd & sustained fire trigger group
MP5SD2 - Suppressed SMG with fixed stock
MP5SD2(NT) - Suppressed SMG with fixed stock & Navy trigger group
MP5SD2 (012) - Suppressed SMG with fixed stock & 2nd only trigger group
MP5SD2(0125) - Suppressed SMG with fixed stock & 2nd & sustained fire trigger group
MP5SD2(013) - Suppressed SMG with fixed stock & 3rd only trigger group
MP5SD2(0135) - Suppressed SMG with fixed stock & 3rd & sustained fire trigger group
MP5SD3 - Suppressed SMG with retractable stock
MP5SD3(NT) - Suppressed SMG with retractable stock & Navy trigger group
MP5SD3(012) - Suppressed SMG with retractable stock & 2nd only trigger group
MP5SD3(0125) - Suppressed SMG with retractable stock & 2nd & sustained fire trigger group
MP5SD3(013) - Suppressed SMG with retractable stock & 3rd only trigger group
MP5SD3(0135) - Suppressed SMG with retractable stock & 3rd & sustained fire trigger group

(Instructor's Note: Use Standard ammo – DON'T USE LEAD AMMO – Bleeds off 200 fps – Very dirty shooter – Clean every 300 rnds !!!)

DETAIL OF BARREL AND EXTENSION MP5SD



MP5K – "Short" MP5 introduced about 1978, and some information indicates GSG9 set a requirement that the "K" filled, while other information indicates the requirement came from South America. Regardless of the origin, the "K" remained in relative obscurity within the MP5 family until the efforts of Jim Schatz of HK, Inc. Federal Operations Division developed the MP5K-PDW (Personal Defense Weapon) in 1992 adding a folding stock to the "K" which gave this little gun a more respected place within the MP5 family.

MP5K - Short SMG/adjustable sights
MP5KA1 - Short SMG/fixed sights
MP5K (w/bc) - Short SMG/w/briefcase
MP5K(NT) - Short SMG/w/Navy trigger
MP5K(012) - Short SMG/w/2-round trigger
MP5K(0125) - Short SMG/w/2-round trigger & sustained fire trigger
MP5K(013) - Short SMG/w/3-round trigger
MP5K(0135) - Short SMG/w/3-round trigger & sustained fire trigger
MP5K(N) - Short SMG/w/Navy trigger, threaded barrel, beta night sights, optional stainless steel suppressor
MP5K(PDW) - Short SMG/Navy version w/folding stock
(Instructor's note: 1" shorter bbl than PDW, 40/10mm No longer made.)

OPERATOR USE

1. Point the weapon in a safe direction.
2. Ensure safety selector is in the safe position.
3. Lock the cocking lever to the rear.
4. Insert the magazine into the gun (two clicks then give it a tug).
5. Vigorously slap the cocking handle out of the indent.
6. Put the safety selector on the desired mode of fire.
7. Pull the trigger to fire the weapon.
8. After firing, perform a clearing procedure.
9. Once the clearing procedure is completed the weapon is ready for cleaning.
10. Field strip the weapon, then clean.

FIELD STRIPPING

(Instructor's note: Bolt Forward for Take down)

1. Perform a safety check
2. Release the bolt by vigorously slapping the cocking lever out of the indent.
3. Pull out the locking pin(s) holding the buttstock on the receiver and pull the buttstock off. Then reinstall the pin.
4. Pull the bolt group out of the receiver.
5. Remove the center locking pin and remove the trigger group. Then reinstall the pin.
6. Push out the front locking pin and remove the handguard. Then reinstall the pin in the handguard bracket.
    a. For the SD, use a tape covered screwdriver to remove the handguard.
7. Looking at the front of the bolt head, rotate the head clockwise until it disengages from the carrier.
8. Separate the bolt head, locking piece, firing pin and spring, and the bolt head carrier.
9. Remove the safety/selector and pull the trigger group out of the trigger housing.

THE MP5 IS NOW FIELD STRIPPED AND READY FOR CLEANING!

OPERATOR MAINTENANCE

CLEANING - The MP5 will function in extremely adverse conditions and will operate while quite dirty. However, this is not the recommended method of operation. This firearm is NOT self cleaning just as it is not self shooting.

It should therefore be cleaned after every time it is fired. A standard guide to establish during firing is 1000 rounds, and then cleans (300 rounds for the SD).

CLEAN IS CLEAN. This is your standard!

SOLVENTS - Mineral spirits, dry cleaning solvents such as **Var-sol, Safety Clean #105. NEVER GASOLINE!** These are for general cleaning throughout the gun. Some biodegradable solvents can leave a gummy residue.

BORE CLEANERS - **Hoppe's Nitro Solvent, Shooter's Choice,** etc. Any commercial bore cleaner.

BORE BRUSHES - Bronze bristle, copper, and brass are recommended. Nylon is OK. **Never ever use stainless steel.**

PATCHES - Soft and absorbent. We recommend knitted patches as woven patches may leave strings. **Southern Bloomers** is excellent.

LUBRICANTS - **Break-free, Eze-ox, Slick 50 1-lube**, etc.

PRESERVATIVES - **Break-free, Ballistol, Rig**, etc.

CARE AND CLEANING

BARREL - Clean from the chamber end always!! Push the brush or the patch through in one stroke. Brush with solvent. Wash brush!! Patch dry until clean, repeat brushing if necessary. Lube barrel inside and out to prevent rust. Fouling shots are fouling!

RECEIVER - Clean with mineral spirit solvents and brush to remove large deposits of carbon and dirt. Pay particular attention to the barrel extension area. Generally Lube throughout.

BOLT GROUP - Clean with brush and solvent. Air dry. Lube.

BUTTSTOCK - Clean with brush and solvent. Air dry. Lube.

TRIGGER GROUP - Clean with brush and solvent. Flowing or pouring solvent may be a help. Air dry. Lube, paying particular attention to the axles.

HANDGUARD - Wipe off with damp cloth or wash with soap and water and air dry completely. Do not lube, but you may have to wipe the handguard with an oiled cloth lightly if a white residue appears.

MAGAZINE - Wipe off the outside and the follower then lube lightly to prevent rust.

VISUAL CHECKS - The operator should know his gun well enough to know if there is something wrong with it. He should perform a visual inspection of the gun as he is cleaning it.

REPORTING - Encourage your people to report problems, not fearing retribution.

ASSEMBLY OF THE MP5

1. Remove the locking pin from the handguard bracket.

2. Attach the handguard to the gun and replace the locking pin.

3. To assemble the bolt group, insert the firing pin into the firing pin spring and insert them into the bolt head carrier. Install the locking piece and turn counter-clockwise ¼ turn.

4. Install the bolt head over the locking piece and rotate the bolt head counter-clockwise until the assembly snaps into position level with the carrier.

5. Insert the bolt group into the receiver.

6. Remove the center locking pin and attach the trigger group to the receiver and insert the locking pin.

7. Remove the rear locking pin from the receiver and attach the buttstock.

8. Insert the rear locking pin.

FUNCTION CHECK

1. After assembling the gun, pull the cocking lever to the rear and release.

2. Put the selector on “SAFE” and pull the trigger. The weapon should not fire.

3. Put the selector on “SEMI” and pull the trigger. The hammer should fall.

4. Keep the trigger pulled to the rear and cycle the cocking lever.

5. Release the trigger to ensure that the trigger will reset.

6. Repeat several times to make certain the weapon functions correctly.

7. Rotate the selector to Full automatic and pull the trigger, holding it to the rear. The hammer should fall.

8. Holding the trigger to the rear cycle the cocking lever and the hammer should fall each time the bolt slams forward, resetting only after you release the trigger.

OPERATING PRINCIPLE

There are three commonly accepted operating principles used to operate an auto loading firearm. They all use the kinetic energy released as the round is fired. The powder in a modern cartridge is converted in a half dozen milliseconds from a dry powder to expanding gases 900 to 1,000 times the volume of the powder. Additionally the pressure of this expanding gas can average 38,000 psi with a peak of over 43,000 psi in a 9mm x 19 cartridge.

This firing causes many things to happen. First, as the gases expand the bullet moves from the case into the barrel and the force required to move the bullet causes an exact force to be exerted in the opposite direction. This will become recoil energy and is the power behind two of the operating principles. Second, the gases behind the bullet are continuing to expand. They push the bullet down the bore imparting spin to the bullet by the inscription of the bullet on the lands and grooves of the bore. These grooves are in the shape of a spiral which makes the bullet turn as it travels down the barrel. It can achieve a rate of spin of almost 80,000 rpm in a 9mm. The expanding gases if vented and applied to pistons or rods can be made to power the mechanism of the auto loader. The M-1, M-14, M-16, Remington 1100, M-60 machine gun, and Desert Eagle are just a few of the gas operated weapons used.

One of the features of the gas operated gun is that the barrel is stationary and that the gas is vented from the barrel forward of the mid point of the barrel. This creates a delay, which enables the bullet to leave the muzzle and the pressure to drop to a safe level prior to the action opening.

In the recoil operated system, the barrel and breech, barrel and bolt, barrel and slide remain closed while the mechanism is in recoil until the bullet leaves the bore and the pressure drops to a safe level. This is done through timing, but the barrel in a recoil system moves. Examples are numerous as all Browning design pistols are recoil operated. The Browning Hi-Power, M1911A1, Beretta, Smith autos, Glock, Sig and many more including our own USP.

Another method of utilizing the recoil energy is called Blowback and broken into two types; simple and delayed. The simple blowback system uses the mass of the bolt to cause the delay necessary for the bullet to leave the muzzle. Uzis, Sterling, Sten, M3 Grease Gun, Mac 10 and most small .22 semi pistols are simple blowback. Delayed blowback however, instead of using the mass of the bolt, incorporates a mechanical disadvantage which must be overcome to unlock the bolt and open the action. In the case of the HK MP 5 the disadvantage is caused by the rollers. This style of bolt system enables the bolt to be light. If the G3 used simple blowback, the bolt would weigh 36 lbs.

The MP5 functions through the utilization of the symmetrical transmission of energy. The equal and opposite reaction to the bullet traveling down the bore provides more than enough energy to function the gun.

(Instructor's note: Simple blowback – 22LR)

CYCLE OF FUNCTIONING

A reoccurring sequence of mechanical events which take place in the operation of an auto loading firearm.

1. **FEEDING**: Removing a round from the magazine.

   As the bolt moves forward under the pressure of the expanding recoil spring, the feeding pawl on the bolt head rides between the lips of the magazine stripping a round out of the magazine and feeding it into the chamber.

2. **CHAMBERING**: Placing the round into the chamber of the barrel and seating it fully.

   The bolt pushes the round forwa4rd into the chamber until the mouth of the casing comes to rest on the end of the chamber. As the round is in the final stages of chambering the bolt carrier contacts the release lever of the trigger group and the hammer starts to fall, but the sear is in the way and the sear notch of the hammer engages the sear.

3. **LOCKING**: Closing and locking of the breech mechanism prior to the shot.

   The bolt, being pushed by the recoil spring, continues to apply pressure to the base of the cartridge until the extractor cams out allowing the bolt to snap forward. The front of the bolt head hits the back of the barrel and stops its forward movement. Once the bolt head has stopped moving, the bolt carrier and locking piece continue forward for about 4mm until the locking piece forces the locking rollers out into the locking recesses of the barrel extension.

4. **FIRING**: Ignition of the propellant powder.

   The trigger is pulled and pushes up on the rear of the sear causing the front to move down releasing the hammer. The hammer falls to the firing pin and overcomes the tension of the firing pin spring driving the firing pin into the primer. The primer detonates, igniting the propellant powder and firing has occurred. When the sear releases the hammer, the spring in the sear cause to travel a predetermined motion. This setting of the sear prevents double firing on SEMI and the sear is reset to catch the hammer before the hammer hits the firing pin. In full automatic the sear is held a little further out of the way and the hammer misses it and continues to hit the firing pin until the shooter releases the trigger.

5. **UNLOCKING**: Removal of any blocking mechanism from the breech so the breech can open.

   The resultant force of the cartridge firing creates an impact on the bolt head that sends force through the rollers into the locking piece, knocking it to the rear. Once the locking piece moves from between the rollers, the bolt is unlocked.

6. **EXTRACTING**: Removal of the fired cartridge case, or a round from the chamber.

   As the bullet is leaving the cartridge case, expanding gases pressurize the inside of the case and the flutes in the chamber. This prevents the case from sticking to the wall of the chamber and residual gas pressure floats the case out of the chamber on this film of high pressure gas.

7. **EJECTING**: Expulsion of the round or fired case from the gun.

   The extractor holds the empty case to the face of the bolt head as it travels to the rear. The carrier rides over the rear of the ejector and the front comes up through the face of the bolt hitting the case as the bolt moves to the rear. The extractor creates a pivot and the ejector provides thrust as the case is knocked out of the ejection port.

8. **COCKING**: Resetting of the trigger mechanism to enable subsequent shots to be fired.

   While the bolt moves to the rear, the hammer is pushed back and the bolt rides over it. When the bolt moves forward for the next cycle the hammer starts forward, but is held by the catch assembly. The catch assembly holds the hammer until just prior to locking when the carrier trips the release lever which moves the catch assembly and the hammer falls to the sear. Shooter releases the trigger causing the sear to snap back into position and the gun is ready for the next shot.

DISASSEMBLY SF (SINGLE FIRE) TRIGGER GROUP

This type of trigger is designed to allow the function of single fire only. The sear engages the hammer each time the bolt carrier returns the hammer rearward because of the sear spring moving the sear forward to engage in the sear notch of the hammer. Because of trigger placement, the hammer will stop and will require resetting of the trigger to move the sear out of the hammer sear notch. Therefore, a release lever and a catch are not required. Follow disassembly procedures for SEF trigger mechanisms. Assembly procedures are the same as SEF without installation of the release lever and the catch.

DISASSEMBLY/ASSEMBLY

The gun has been divided through field stripping into the six assembly groups. We will address each group as an individual subject.

A. BARREL AND RECEIVER GROUP

Consists of four component areas to be disassembled and assembled. Front Sight Holder, Cocking Handle Assembly, Magazine Release, and Rear Sight Assembly.

1. FRONT SIGHT HOLDER

A. DISASSEMBLY

1. Contains the front sight, front sight clamping sleeve, cocking tube cap and barrel w/rivet.

2. Using a punch and a hammer, knock out the clamping sleeve under the front sight from front to rear.

3. Pull the front sight out of the holder. There is a front and rear to the sight.

4. Looking at the holder from the front, there is a plunger located to the outside of the center loop of the holder. Press in and remove the cap.

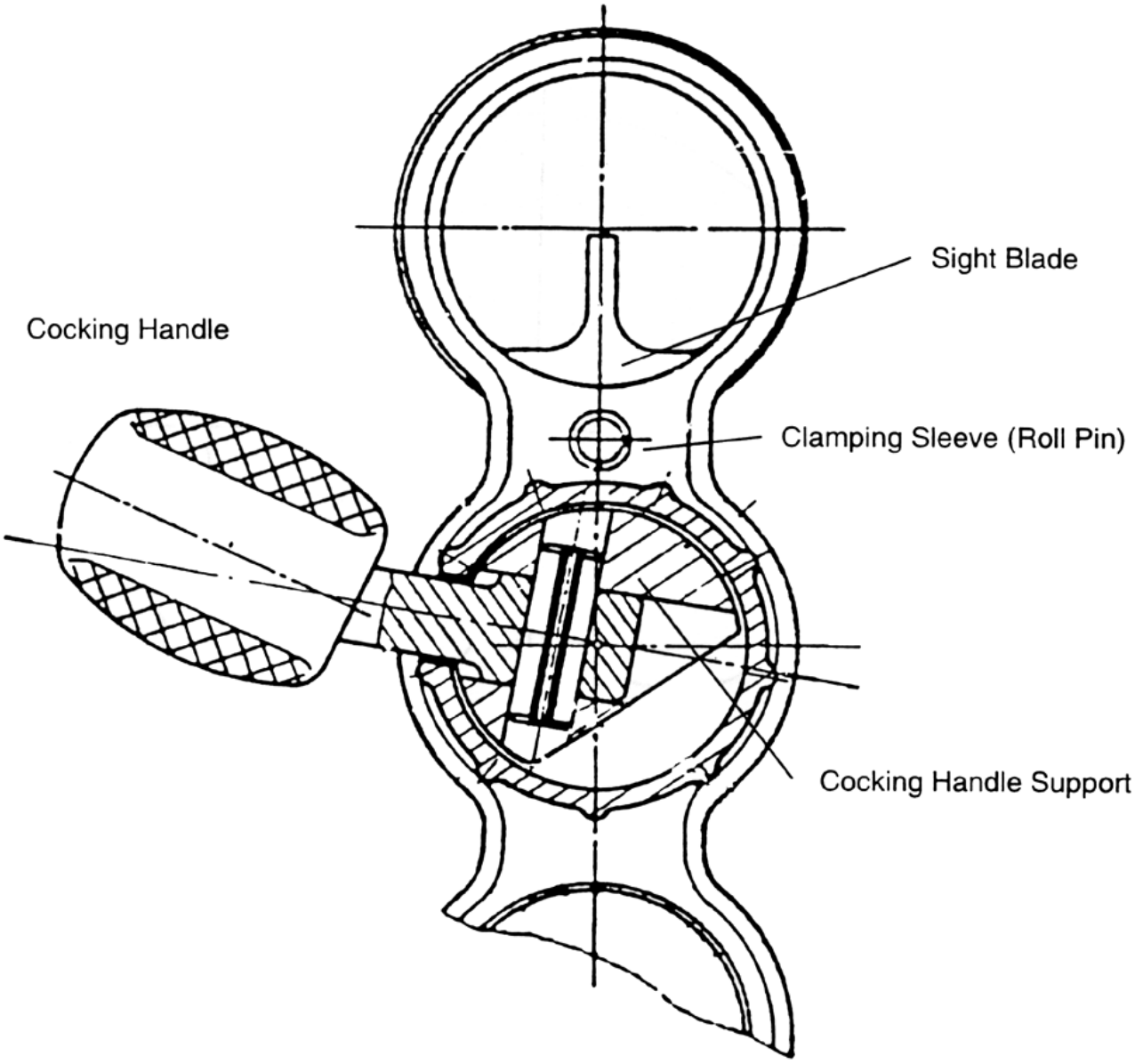
B. ASSEMBLY

1. Install cap on cocking tube.

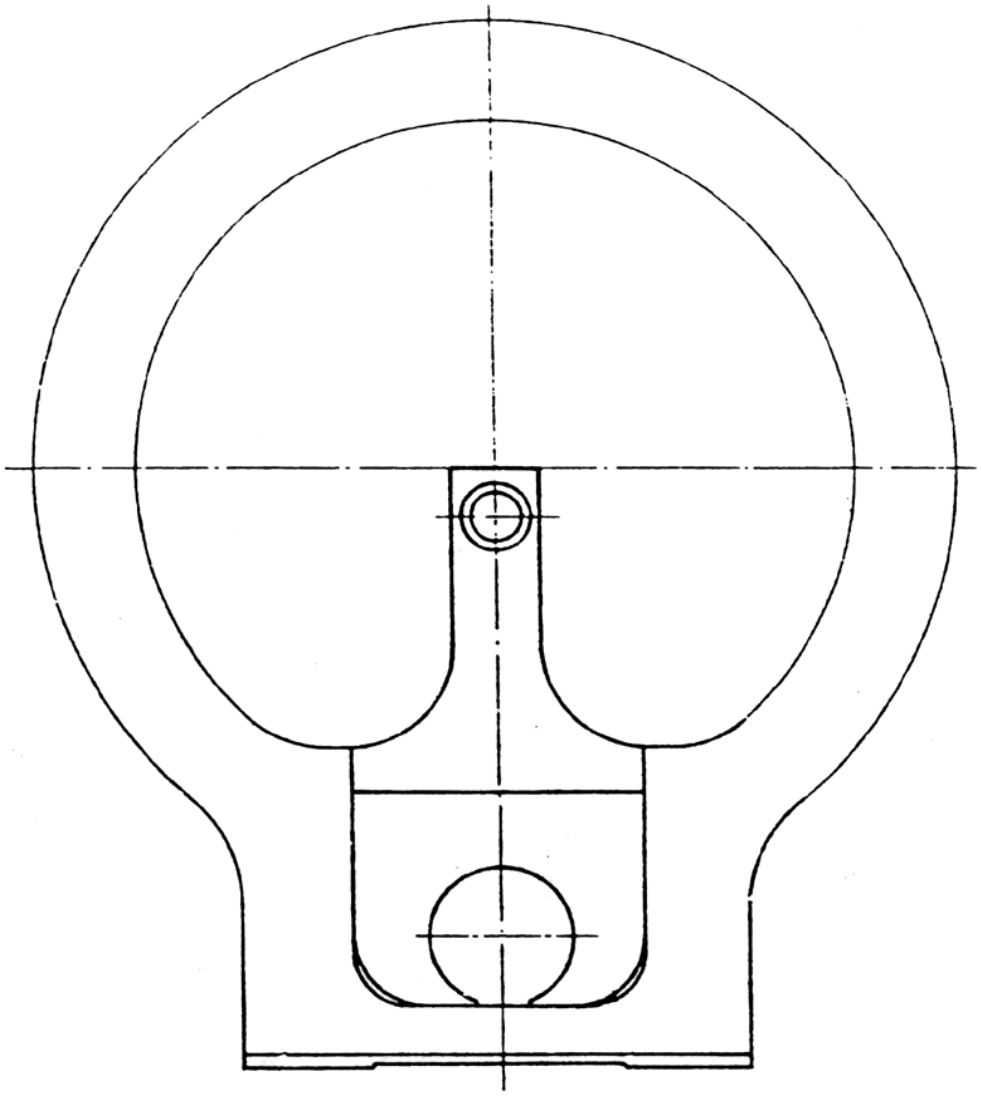
2. Insert front sight in holder ensuring it is oriented properly.

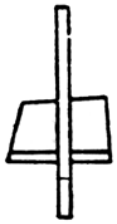
3. Drive in the clamping sleeve from rear to front.

CROSS SECTION OF THE FRONT SIGHT HOLDER AND COCKING HANDLE FOR THE MP5 SUBMACHINE GUN



NAVY FRONT SIGHT ASSEMBLY





Post with Tritium Dot

2. COCKING HANDLE ASSEMBLY

A. DISASSEMBLY

1. With muzzle pointed away from you, looking down on the top of the receiver, pull cocking handle to the rear.

2. Lift handle to the right, push forward, observe the clamping sleeve in the cocking handle support.

3. Note: When the clamping sleeve is centered in the top access hole it is not in alignment in the bottom hole.

4. Align the top hole so the clamping sleeve is only half visible to the left side of the access hole and carefully drive it out.

5. Pull the handle out, left the muzzle and the cocking support will fall out the rear of the receiver.

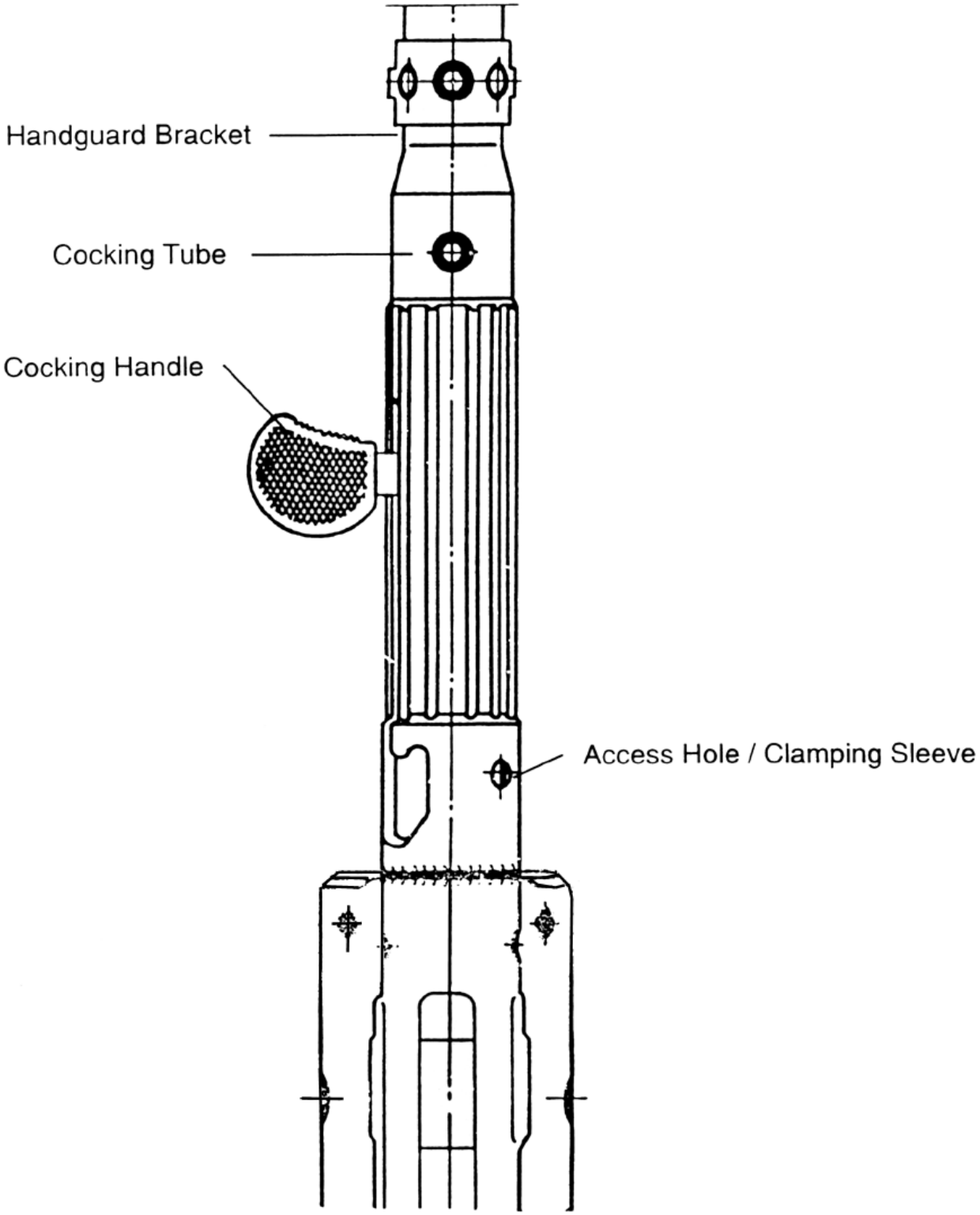
B. ASSEMBLY

1. Install the cocking handle support

2. Place cocking handle into the support

3. Install clamping sleeve

COCKING MECHANISMS OF THE MP5



3. MAGAZINE RELEASE

A. DISASSEMBLY

1. Turn receiver upside down, muzzle to your left. Look down the side of the magazine well closest to you and observe the clamping sleeve in the magazine release button. Drive it out.

2. Pull the button off the shaft of the catch.

3. Push the shaft out of the magazine well. **Note: the spring you see is not captive!!**

4. Reach in through the receiver and cover the spring with your finger, using a small screwdriver, rake the spring out of position.

5. Tilt the receiver away from you and the contact piece will fall out of the magazine well.

B. ASSEMBLY

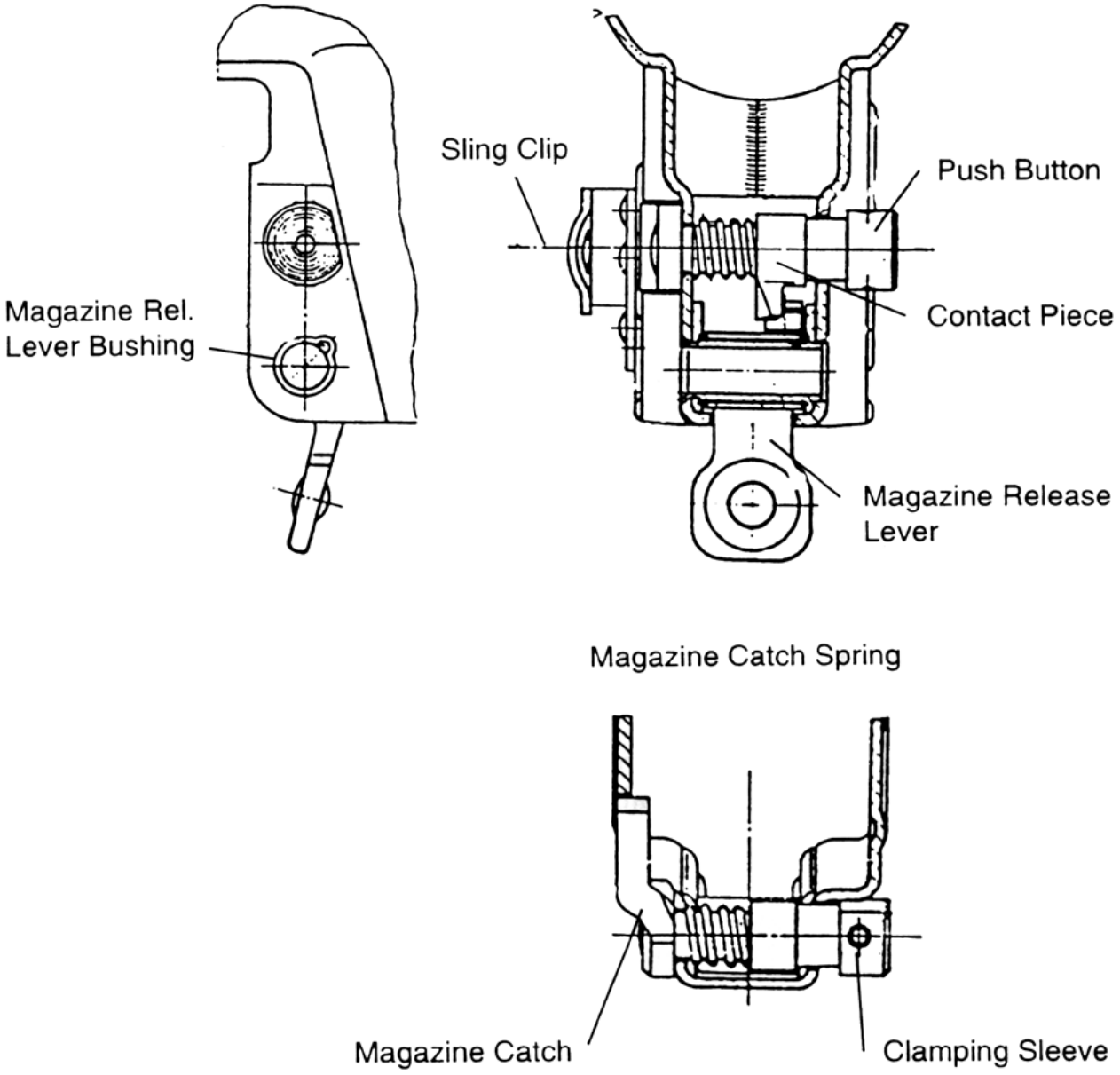
1. Install contact piece with the receiver laying on its right side and the muzzle to your **left**.

2. Place contact piece in the approximate position and using a punch guide into place.

3. Press spring into position on contact piece. Install magazine catch from opposite side.

4. Place button on shaft with flat side towards the muzzle, press to align pin holes, drive in clamping sleeve.

MAGAZINE CATCH FOR THE MP5 SUBMACHINE GUN



4. REAR SIGHT ASSEMBLY

A. DISASSEMBLY

1. Insert rear sight adjustment tool into the rear sight drum and engage the ears of the tool with the notches in the sight.

2. Lift out the screwdriver portion of the tool and reinsert it being careful to keep the tool perpendicular to the drum.

3. The drum should turn free of the tool. If the tool turns also, do it over.

4. Unscrew the drum until it comes off the sight base, but **WATCH THE SPRINGS AND PLUNGERS UNDER THE TOOL, THEY ARE NOT CAPTIVE AND ARE CAPABLE OF WARP FACTOR 3**!!

5. Remove the springs and plungers.

6. Unscrew the locking screw and remove the screw, the lock washer and the oval spacer.

7. Lift sight base and remove. Use CAUTION as the sight base ball and spring can fall out.

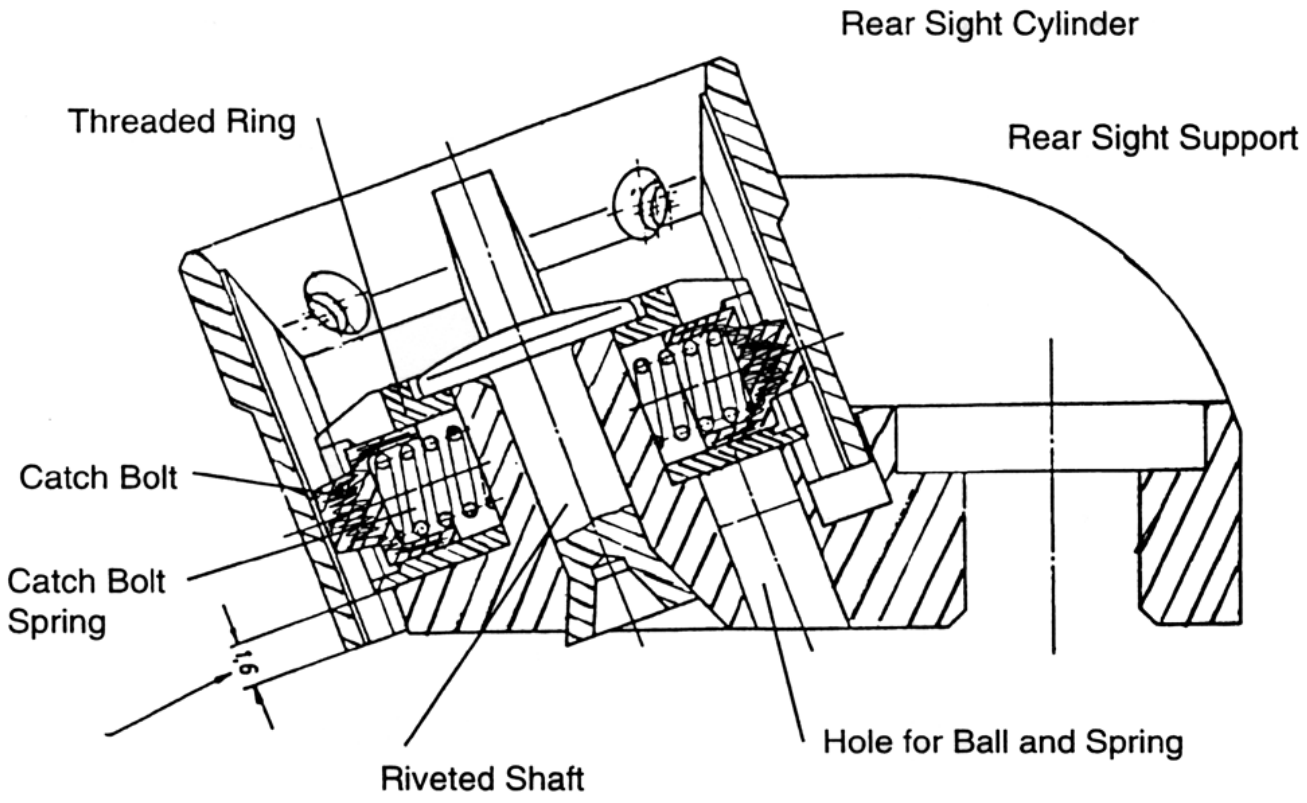
A. ASSEMBLY

1. Replace sight base ball and spring in sight base and reinstall base to receiver, insuring windage screw is placed in slot on underside of sight base.

2. Install spacer, lock washer, and locking screw. Install springs and plungers, with plungers facing out.

3. Engage adjustment tool and slide drum down to screw into position. DO NOT screw drum tight to the bottom.

DETAIL OF REAR SIGHT



B. BOLT GROUP

The bolt group of the HK roller locked system is the heart of the system and a thorough understanding of it is essential. It is comprised of six major components and we are going to examine each individually.

1. BOLT HEAD

A. DISASSEMBLY

1. Case hardened, carries the brunt of the force of the round firing. Contains the rollers, the extractor and spring. Independent of the other parts.

2. Drive clamping sleeve into the body of the bolt head.

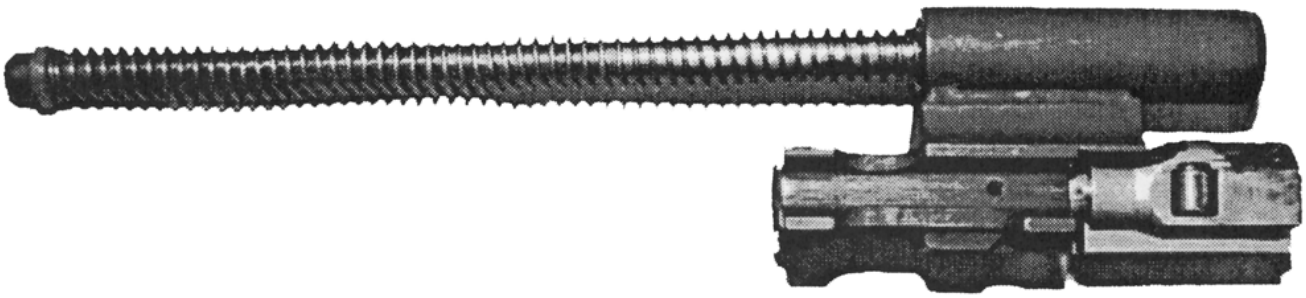
3. Remove the rollers and roller holder.

4. Insert tool into the extractor spring loop and rotate lengthwise. Spring will invert and can then be removed, as can the extractor.

B. ASSEMBLY

1. Install the extractor, push spring in right side up, push against a hard surface until front of bolt head makes contact, and then lift the rear of the bolt head in a rotating motion.

2. Turn bolt head upside down, install roller holder w/buttons up. Set a roller on each button, rotate upright, carefully install clamping sleeve.



2. LOCKING PIECE

Nothing to disassemble but inspection is necessary. Locking piece angles are critical to the proper function and safety of the gun, don't grind or stone on them.

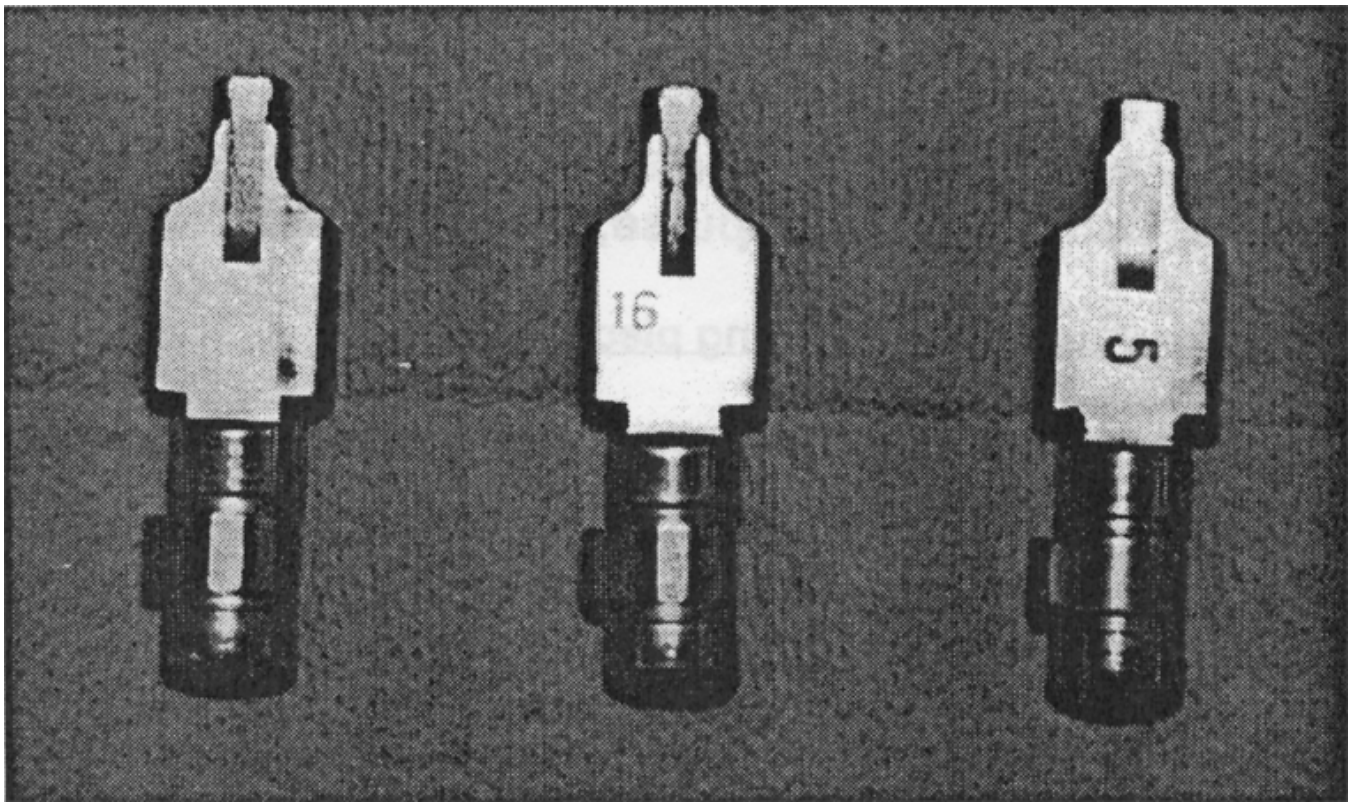
There are locking pieces for each of the three major variants.

They are marked as follows:

A = NO MARKINGS *8" bbl*
SD = 5 or SD only *6' bbl, #5 old marking*
K = 16 *4" bbl*
PDW = 80 *5" bbl*
.40 cal = 26 (old**) lo 24 (**new**)**
10mm = 24 Low impulse, 25 Hi impulse

Do not interchange these locking pieces!!

They act with the bolt head carrier as one piece for functioning purposes.

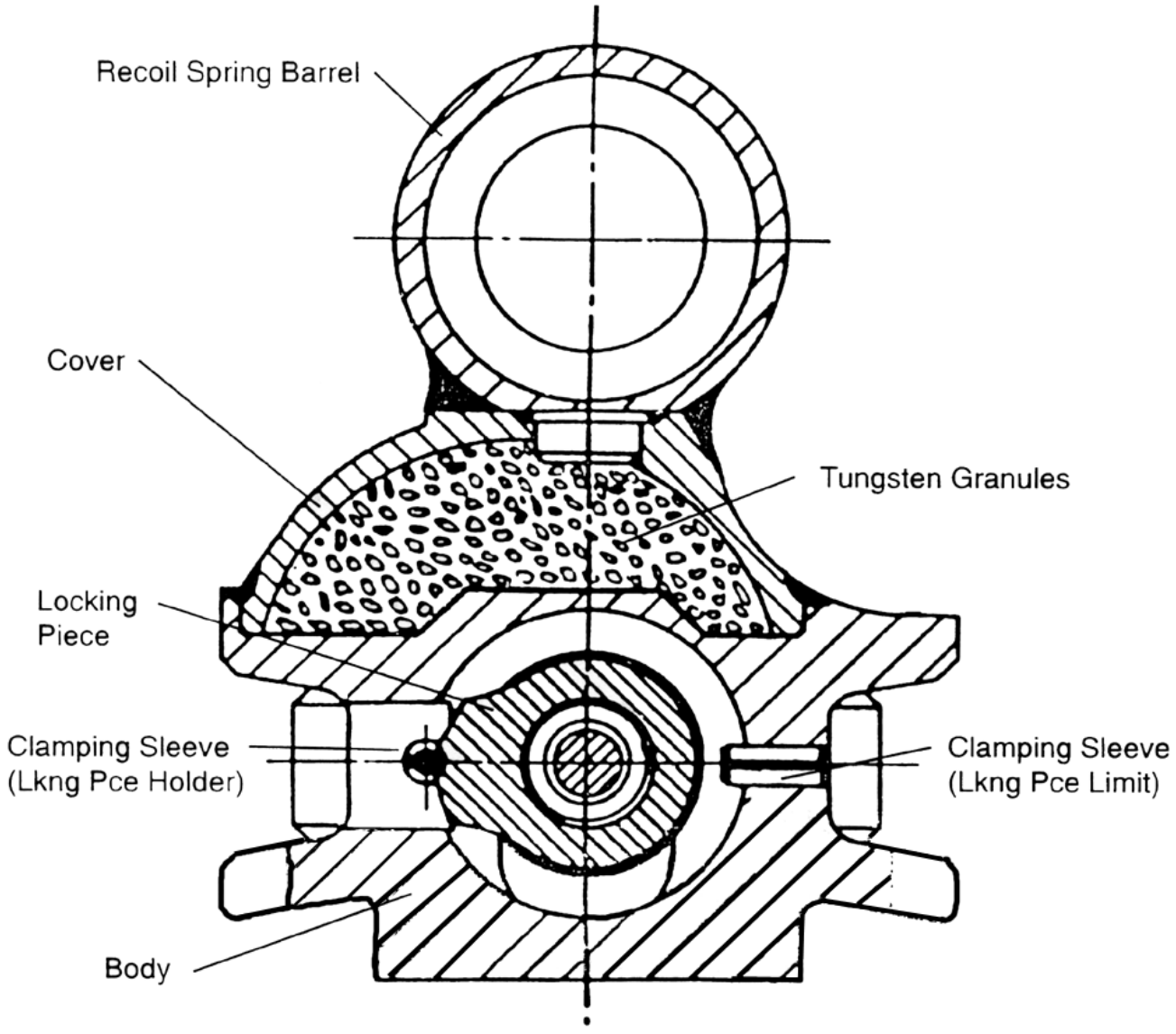


3. BOLT HEAD CARRIER

Composite piece consisting of three pieces welded together. Contain tungsten granules loose in a cavity under the recoil spring barrel to act as a dead blow to prevent bolt rebound.

Acts with the locking piece as one piece for functioning purposes.

BOLT CARRIER MP5 SHOWING TUNGSTEN GRANULES



4. FIRING PIN

One piece firing pin rests on a firing pin spring.

Inertia driven, the pin is light and the spring very strong thereby creating a situation where the firing pin doesn't have enough mass to achieve velocity sufficient to overcome the strength of the firing pin spring and cause an accidental discharge if the gun were dropped. This is why the MP5 has no firing pin block.

5. FIRING PIN SPRING

Helical compression spring. Pulls the firing pin out of contact with the primer once the firing pin has been driven forward.

6. RECOIL SPRING AND GUIDE ROD ASSEMBLY

Consists of a rod with a helical compression spring held on the rod by an end cap riveted to each end of the rod. The spring is further retained by a nylon guide ring at each end.

Slide spring back to expose rivets. Punch rivets out, remove end cap and guide ring. Carefully release tension from the spring and remove spring. Other guide ring can be removed at this time.

7. BOLT GAP

The distance between the rear of the bolt head and the front of the bolt carrier when the bolt is IN battery and the hammer forward.

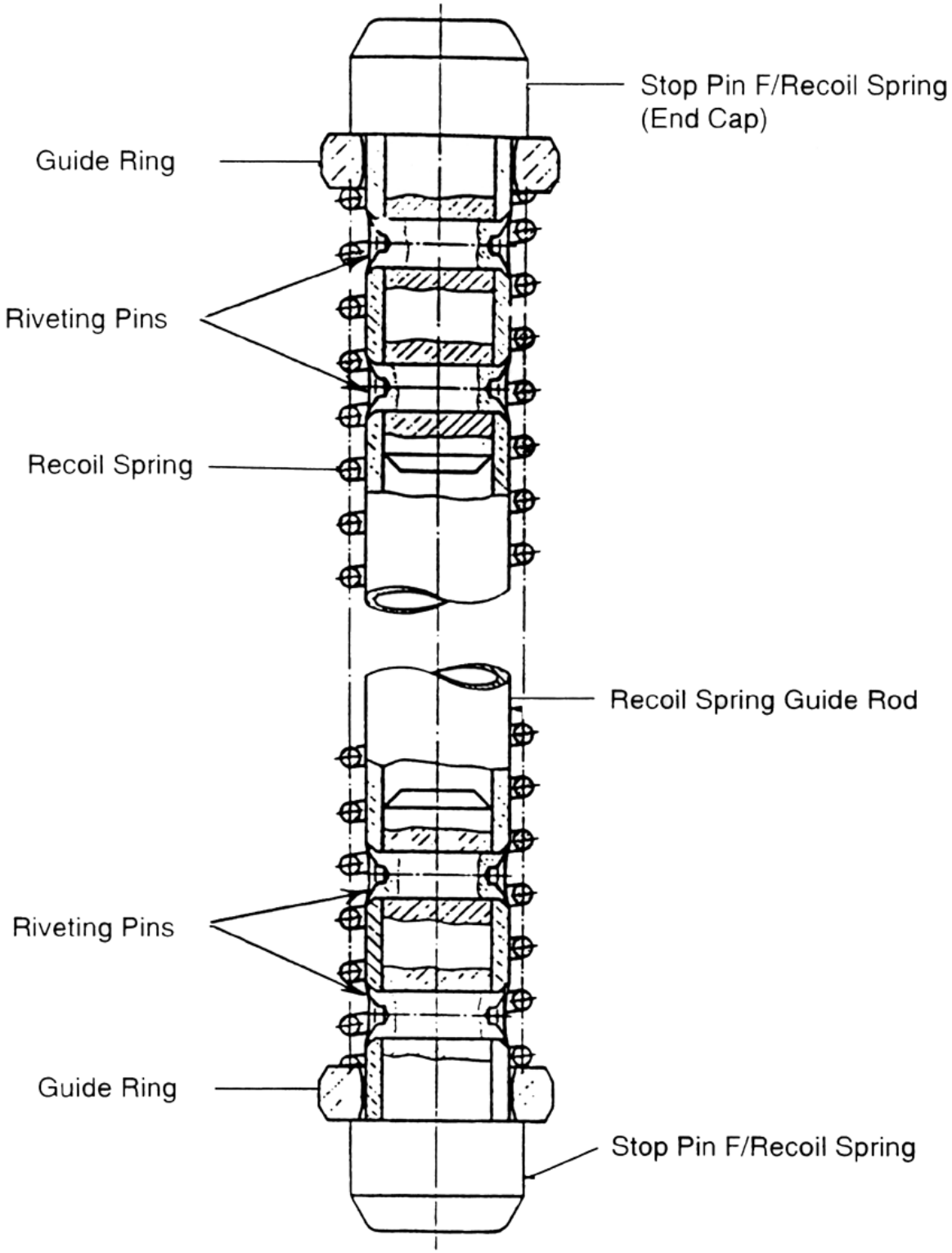
Bolt Gap Range	**Roller Sizes**	
.25 mm - .45 mm (ideal)	8.04 mm - =	
.25 mm - .50 mm (maximum)	8.02 mm - -	
STANDARD ►	8.00 mm **◄ STANDARD**	
.010" - .018" (ideal)	7.98 mm - -2	
.010" - .018" (maximum)	7.96 mm - -4	**1 Size = .10 of Bolt Gap**

MEASURE BOLT GAP

Assemble the weapon and do a function check.

After the function check the bolt is to be locked to the rear. To check the gap, point the weapon toward the floor, release the bolt and let it snap forward. Put the selector on semi. Pull the trigger to let hammer fall. Turn the weapon upside down and insert a feeler gauge through the magazine well into the gap between the bolt head and bolt carrier. Record the measurement once a firm drag is obtained on a gauge.

RECOIL SPRING GUIDE ROD ASSEMBLY MP5



C. MAGAZINE

Staggered stack MAGAZINE (not clip) with the capacity of 31 rounds. However, the magazine was designed for 30 rounds since space must be left in the magazine for the feed pawl area of the bolt head to compress the stack of rounds during a loading sequence with the bolt forward. The magazine bottom is removable by way of two tabs front and rear. They are stabilized by a locking plate that must be pushed into the magazine before the tabs can be compressed.

A. DISASSEMBLY

1. Push locking plate into magazine housing.

2. Press tabs in and remove floor plate.

3. Remove the follower spring, follower, and locking plate.

B. ASSEMBLY

1. Insert the follower magazine spring, locking plate into the housing Push locking plate into housing.

2. Snap floor plate onto magazine.

D. HANDGUARD

Streamline (slim line) is the original handguard for the MP5. It is fiberglass with a steel reinforced band in the front. Its major problem concerns he ability to dissipate heat. If the gun is used in a hot environment the gun had a tendency to get quite hot.

Tropical (wide) handguard is polymer with no steel insert and solves the problem of heat dissipation by allowing hot air to rise from the holes in the top of the handguard while drawing cooler air in from the bottom.

E. SLING

The multi-purpose combat sling is quite versatile and can be adapted to perform many tasks. There are two sling pieces, one with a carbine hook on one end and a buckle on the other end. The other piece has only one buckle on it and is a double eyed buckle.

Lay the first sling on a table with the carbine hook to your left and the spring loaded gate toward you and the sliding sling clip down. Lay the other sling on top and insert the carbine hook through the end compartment of the double eyed buckle from the bottom. Lay the top sling on the bottom sling and insert the tail of the top sling through the buckle on the opposite end from the carbine hook. The top sling goes in the buckle and loops back over the end of the sling and is reinserted through the buckle from the opposite direction. A loop forms that will fit over the head and one arm. The carbine hook attaches to the front sling mount and the

clip which is hanging from the underside of the sling attaches to the rear sling mount. The double eyed buckle is used to attach to the center sling mount on the left side of the magazine well.

F. TRIGGER GROUP

Available in several versions, but all are based on the Standard S-E-F mechanism. Available are the:

1. Standard S-E-F

S - Sicher
E - Einselfeuer
F - Feuerstoss

2. Navy trigger (ambidextrous S-E-F) –NT

3. 2-round burst (Safe-Semi-2 round-sustained) – (0125)

4. 3-round burst (Safe-Semi-3 round-sustained) – (0135)

5. SF (Safe-Fire) – (SF)

6. 2-round only (Safe-Semi-2-round) – (012)

7. 3-round only (Safe-Semi-3-round) – (013)

A. DISASSEMBLY

1. Assume original starting position.
2. Push out ejector spindle from the inside.
3. Remove ejector and ejector spring.
4. Pull hammer back slightly and push out hammer axle.
5. Remove hammer, hammer strut and hammer spring.
6. Disengage forward end of trigger return spring from flange in housing.
7. Push out trigger axle and remove trigger, sear, trigger return spring.
8. Push out catch axle and remove catch assembly.
9. Remove release lever.

If applicable

10. Disengage active and dead legs of safety/selector release lever.
11. Push out safety/selector release lever pin from left to right.
12. Pull safety/selector lever from the housing.
13. Push safety/selector release lever spring pin out from left to right and remove spring and sleeve.

B. ASSEMBLY

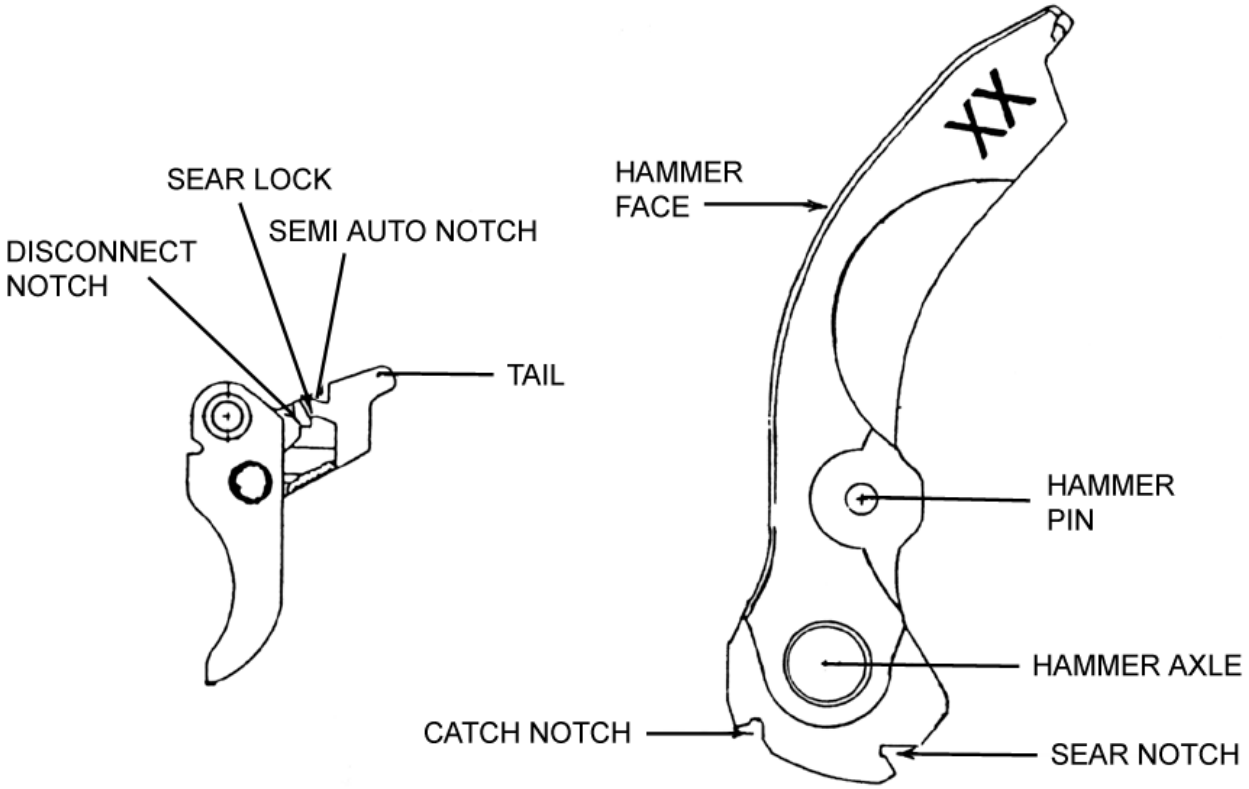
1. Replace sleeve in spring and reinstall in rear of housing being careful of the position of the spring legs.
2. Insert punch from the left, align hole and insert pin from the right.
3. Reinstall safety/selector release lever and engage the spring leg. Engage the dead man leg on the housing stud.
4. Replace release lever.
5. Insert catch assembly and install catch axle. Rake axle hole if necessary.
6. Locate trigger return spring on left side of trigger and position it in the housing. Put axle in only far enough to hold it in place. Lay sear on sear block and rest on catch spring roller, press sear into trigger, push axle through.

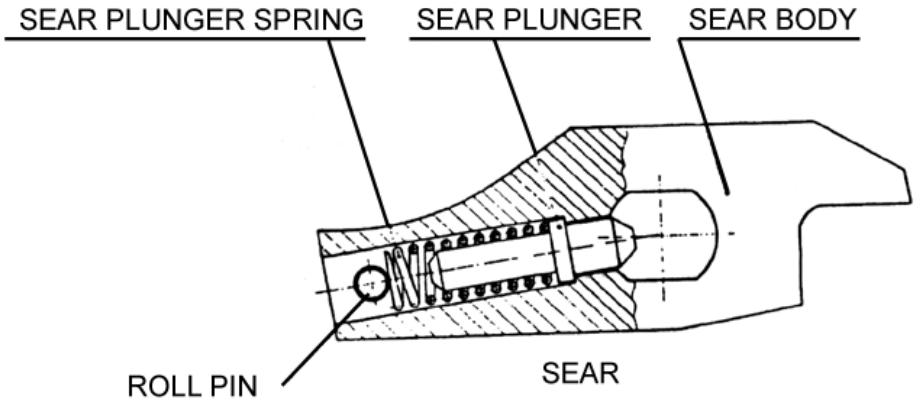
7. Slide spring on hammer strut and install hammer in housing and push axle through.

8. Reinstall ejector, spring, and ejector spindle.

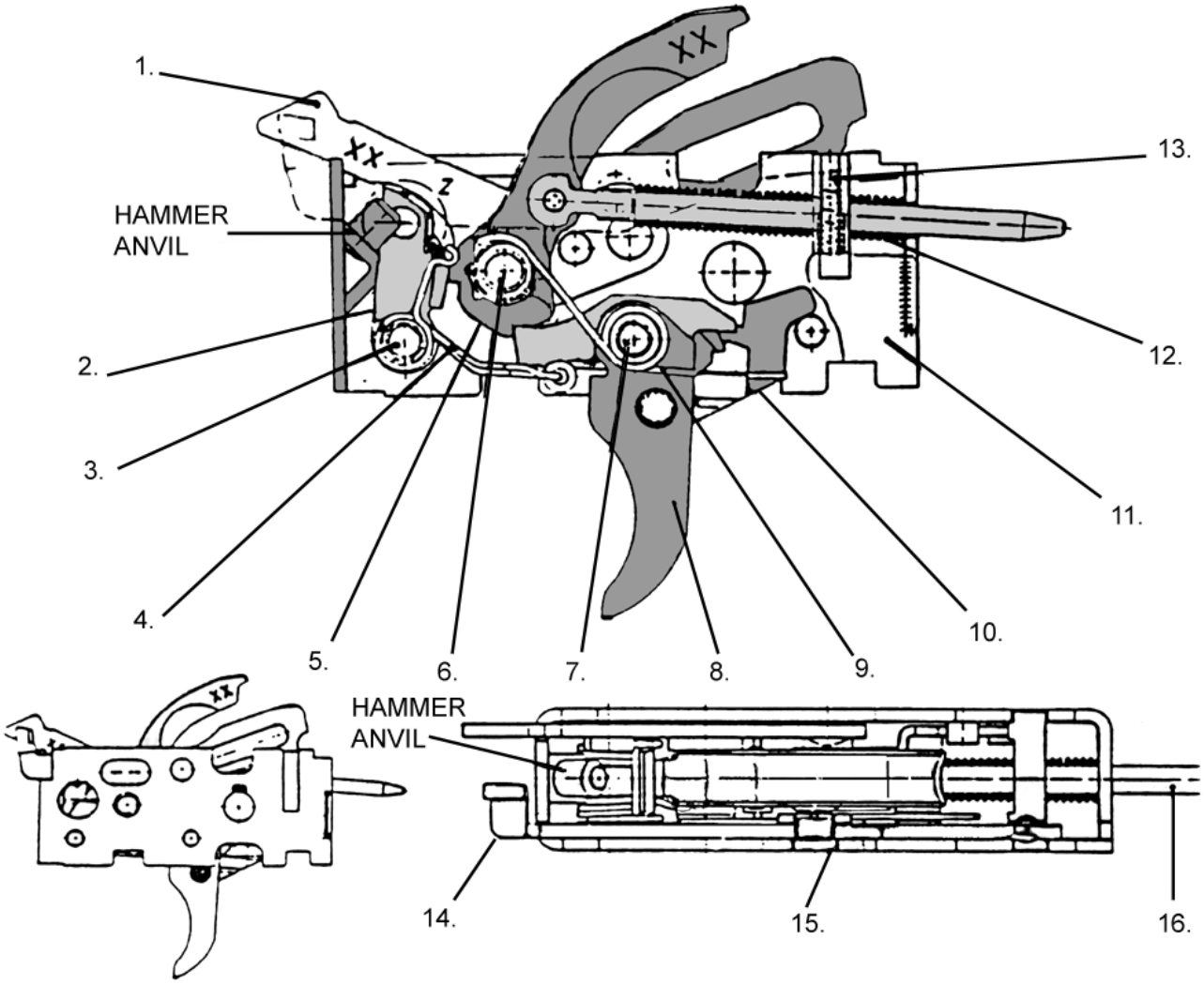
9. Place mechanism into the housing, install safety.

NOMENCLATURE OF TRIGGER PARTS



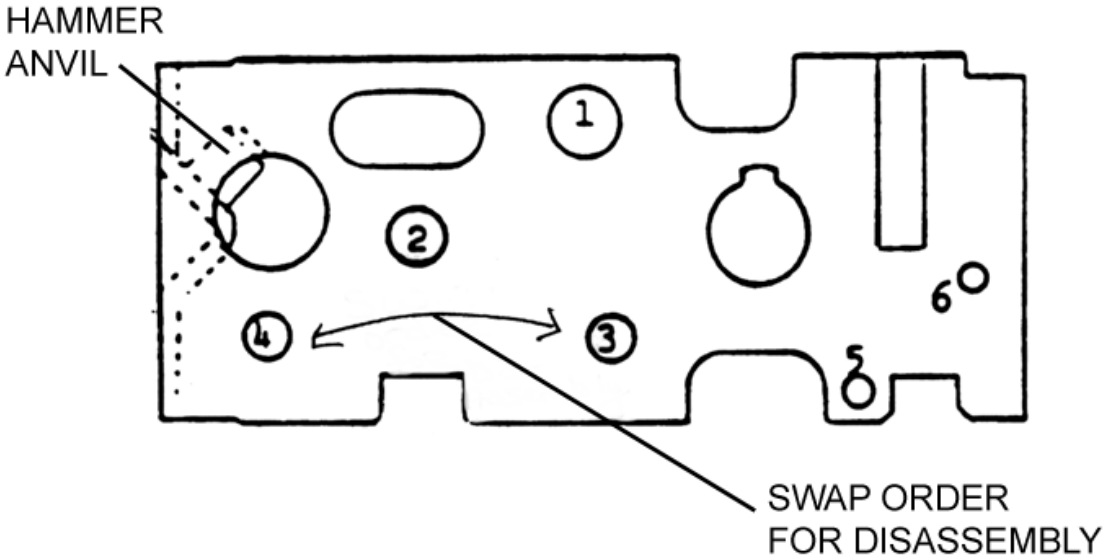


NOMENCLATURE OF TRIGGER MECHANISM

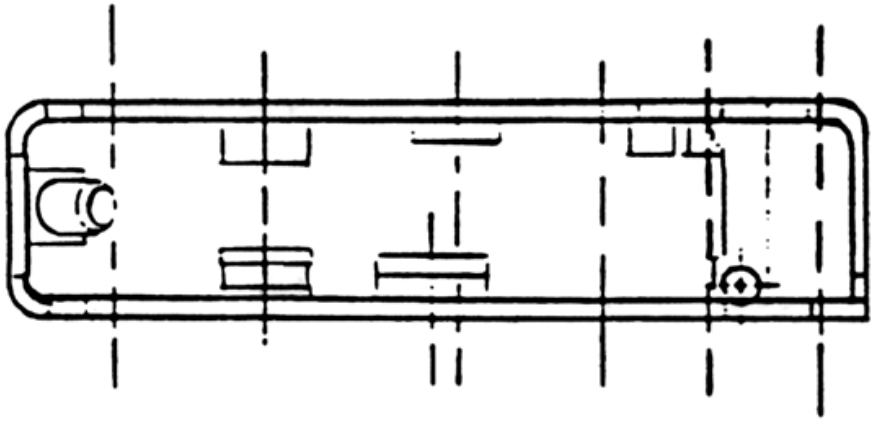


1. Release lever
2. Catch assembly
3. Catch axle
4. Elbow spring w/roller
5. Hammer
6. Hammer axle
7. Trigger axle
8. Trigger
9. Trigger return spring
10. Sear
11. Housing
12. Hammer spring
13. Ejector spring
14. Ejector
15. Ejector spindle
16. Hammer strut

DISASSEMBLY SEQUENCE FOR THE TRIGGER MECHANISM MP5 SUBMACHINE GUN



DISASSEMBLE IN ORDER
#5 & #6 FOR NAVY TRIGGER GROUP



1. EJECTOR SPINDLE
2. HAMMER AXLE
3. TRIGGER AXLE
4. CATCH AXLE
5. SAFETY RELEASE LEVER PIN
6. SAFETY RELEASE LEVER SPRING PIN

(Instructor's note: 20 parts for SEF & 25 parts for Navy)

INSPECTION

LTI (Limited Technical Inspection)

Armorers are called upon to perform equipment inspections as one of their functions. These inspections are generally referred to as LTI's. They are limited in the sense that they do not require full examination of each technical facet of the equipment, but have as their purpose a lesser objective. LTI's are directed at determining the effectiveness of a maintenance program, or determining weapon safety for firing range use. LTI's are required when determining budget and ordering requirements for parts and supplies

Procedure:

This is an example of how the inspection of the SMG can be conducted:

PRIOR TO THE LTI THE SMG MUST FIRST BE GIVEN A SAFETY CHECK AND THEN FIELD STRIPPED.

Once the serial number is accurately recorded, Inspect:

1. **Muzzle** - Observe for dents, burrs, bulges
2. **Barrel** - Same as above plus finish and bends
3. **Front sight holder** - Cracked, bent or broken
4. **Cocking tube and lever** - Dents, splits, or burrs, or damaged lever receiver – cracks, dents, bulges, excessive wear, using parts.
5. **Rear sight** - Complete, tight, rusty or dirty
6. **Inside of receiver** - Dirty, cracks, burrs, worn areas
7. **Barrel extension** - Carbon, rust, breakage (if so, weapon is no longer serviceable)
8. **Magazine release mechanism** - Function, complete, wear
9. **Buttstock** - Function, crack, bent, or broken
10. **Trigger group** - Cleanliness, complete, function, cracks, burrs
11. **Handguard** - Cracks, chips, splits
12. **Magazine** - Lips bent, split, broken, housing dented, rust, dirty

Assemble the weapon and do a function check.

After the function check measure the bolt gap and record the measurement.

This type of inspection is used whenever a weapon needs to be inspected. It is technical in nature but it is limited to visual and very basic measurements taken.

Uses for the LTI are many, here are some examples.

Acceptance inspection – when you first receive the guns or if you are reestablishing a new armory and are starting new records, a baseline inspection must be made and any discrepancies noted.

Pre-range fire inspection – can be as detailed as the inspector wants but should at the very least include a check of the safeties and rod the bore.

Post shooting inspection – a must after a shooting. Have your paperwork in order for this one since this will end up in court.

Scheduled periodic inspection – this type of inspection is where the minor problems caused by wear are noticed and repaired before they become major problems. They should be performed at least annually, but can be as often as necessary depending on user needs.

TROUBLESHOOTING

	MALFUNCTION	CAUSE	CORRECTION
1.	Failure to Feed	Magazine – Dirty	Clean
		- Dented	Replace
		- Lips Bent	Replace
		- Spring Broken	Replace Spring
		- Loaded Wrong	Reload
		- Not Seated	Reseat
		Recoil Spring Broken/Bent	Replace
		Weapon Dirty	Clean
2.	Failure to Chamber	Chamber Fouled	Clean
		Barrel Extension Fouled	Clean
		Deformed Cartridge	Pull Back Cocking Lever and Chamber a New Round
		Weak or Broken Recoil Spring	Replace
		Receiver Bent	Replace or Straighten if Possible
3.	Failure to Lock	Missing Rollers	Inspect for damage/Replace Rollers
4.	Failure to Fire	Firing Pin or Spring Broken	Replace
		Bolt not fully Locked	Re-cock and Attempt to fire Again
5.	Failure to Extract	Chamber Fouled	Clean
		Extractor Broken	Replace
6.	Failure to Eject	Extractor/Ext. Spring Broken	Replace
		Extractor Spring Weak	Replace
		Ejector Broken	Replace
7.	Failure to Cock	Hammer Broken	Replace
8.	Recoil Hard	Bolt Carrier Striking Back Plate	Replace Buffer

RECORD KEEPING

1. Accountability Records

Used to keep track of weapons, if a gun leaves your armory it should have a signature for each. Never get rid of the record of that transfer. In the armory, a serialized inventory should be kept and verified at least annually. Weapons in the armory should be stored by make and model, and in serial number sequence.

2. Round Count

Need to keep as accurate a round count as possible. Helps in budgeting.

3. Maintenance Records

Each serial number should have a maintenance record. Everything done to the gun as well as the date and the armorer performing the maintenance should be noted.

UNIQUE ASPECTS OF THE H&K MP5/10 AND MP5/40 SUBMACHINE GUNS

Unless stated otherwise, the assembly groups, accessories and **component parts not mentioned below are interchangeable** between 9mm MP5's and those in 10mm Auto and .40S&W. If there is any question concerning the ability to interchange parts, consult the current "1995 Parts List for MP5 Submachine Gun". If the six-digit part number (sometimes referred to as an "article", "ID" or "identification" number) is the same, the parts are interchangeable. If this part number is different, the parts are unique to the weapon(s) listed therein and should never be mixed.

1. ASSEMBLY GROUPS

BUTTSTOCKS

Fixed Buttstocks (ID# 205586) – Interchangeable between all 9mm, .40S&W MP5's

Retractable Buttstock – While the retractable buttstocks for the 9mm and 10mm/.40S&W MP5's will physically interchange, it is not suggested. The retractable buttstock for the MP5/10 and MP5/40 (ID# 214278) **can be used** on the 9mm MP5 without any trouble. They will fit and function fine. However, the 9mm retractable buttstock (ID# 225558) **should not be used on the MP5/10 or MP5/40.**

The retractable buttstock for the MP5/10 and MP5.40 has a clearance cut on the left "fork" of the buttstock to provide clearance for the bolt catch release lever when the buttstock is retracted (closed). This clearance cut ensures that the bolt catch is not inadvertently actuated by the left fork of the buttstock should the weapon be fired or the bolt group manually cycled with the buttstock retracted. Without this clearance cut, a cut that does not exist on the 9mm retractable buttstock, the movement of the bolt group of the MP5/10 and/or MP5/40 will be impeded during its travel back and forth in the receiver. (The left fork will left the bolt catch release lever out away from the receiver causing it to interfere internally with the bolt group inside the receiver of the weapon.)

TRIGGER GROUPS

The trigger groups of MP5 **should not be mixed** between 9mm MP5's and those of the MP5/10 and MP5/40 submachine guns. The trigger groups for the MP5/10 will interchange and can be used on the MP5/40.

The difference in the trigger groups between the 9mm MP5 and those in 10mm and .40S&W include a clearance cut on the left side of the polymer pistol grip for the bolt catch. In addition, the MP5/10 and MP5/40 ejector (the lever located on and extending out of the left side of the trigger group) **is not the same** as that for 9mm MP5's and must not be interchanged.

BOLT GROUP

The bolt group is not interchangeable between 9mm MP5's and 10mm and .40S&W MP5's. The bolt group parts that are different and are not interchangeable include the bolt carrier, bolt head, recoil spring guide rod assembly (of the MP5/10), locking piece, extractor, locking rollers and possibly the locking roller holder (depending on whether the 9mm MP5 has an old or new style locking roller holder installed, see Component Parts section below). The firing pin and firing pin spring are interchangeable.

FOREARM/FOREGRIP

All standard wide (tropical) forearms, optional slim line, "Tac-Guard", Tactical Light forearms and vertical foregrips that fit the 9mm MP5A2/A3/SF/N will fit and work on the MP5/10 and MP5/40.

CARRYING SLINGS

The multi-purpose carrying slings for the 9mm MP5's are interchangeable with those for the MP5/10 and MP5/40. However, you must keep in mind that the MP5/10 and MP5/40 are designed to be used and are shipped with the ambidextrous carrying sling (ID # 205213) and therefore do not have the center sling attachment "clip" on the left side of the magazine well as is found on the 9mm MP5 A2/A3/SD/SF/N. Because of this difference, a standard multi-purpose carrying sling can be used but the absence of this "clip" fails to provide a center mounting point for the standard multi-purpose carrying sling. On the ambidextrous carrying sling, this clip is sewn into the sling webbing so that it may be utilized on the right and left sides of any MP5s.

BARREL/RECEIVER GROUP & MAGAZINE

No way are these items interchangeable between calibers, for obvious reasons!

2. COMPONENT PARTS

EXTRACTOR

The extractor for the 9mm MP5 is not interchangeable with those of the MP5/10 and MP5/40. The extractors for the MP5/10 and MP5/40 are interchangeable. Be advised that the 10mm and the .40 S&W extractors have extra claws that do not possess a full radius like that found on the 9mm MP5 extractor. The difference is required for proper feeding and ejection in the MP5/10 and MP5/40. Do not confuse this unique design with the 9mm MP5 extractor which has been damaged or cracked.

An improved extractor design for the MP5/10 and MP5/40 will be incorporated into these weapons during 1995. All new production MP5/10's and MP5/40's received after 8/95 possess the improved extractor from the factory. Weapons received prior to that date will be retrofitted with the new extractor design.

The new extractor extends beyond the face of the bolt head. A clearance cut will be made in the barrel to account for the longer extractor (a similar arrangement as that used in the HK21E belt-fed machine gun).

By extending the length of the extractor, it allows the claw of the extractor to be increased in thickness from 1.00 mm to 1.4 mm. This change increases the service life of the extractor and reduces the development of the "sharks teeth" wear pattern that is common with the early extractor design, even though there has not been a documented failure of one of the early extractors even after firing more than 20,000 rounds through numerous different MP5/10's and MP5/40's.

EXTRACTOR SPRING

A silver, thinner, extractor spring with a rise in the center is the only acceptable extractor spring for use in the MP5/10 and MP5/40. The gray extractor spring (ID#200445) that is often used in the 9mm MP5 due to it's greater spring pressure and thus better function and durability, exerts too much pressure on the extractor and can sometimes result in failures to lock (over the rim of the cartridge case) on the larger 10mm and .40S&W cartridges.

RECOIL SPRING GUIDE ROD ASSEMBLY (RSGRA)

All MP5/40's should be fitted with the standard MP5A2/A3/SD/SF/N RSGRA (ID#205596). Only the MP5/10 should be fitted with the longer and stronger RSGRAS from the HK 53 select fire Carbine (ID#203414). This stronger RSGRA is required on the MP5/10 to provide sufficient forward energy to feed and fully chamber and lock the bolt of the MP5/10. All MP5/10s with the FBI have been retrofitted with the HK53 RSGRA to date. All new MP5/10s will be assembled with the HK 53 RSGRA at the factory.

LOCKING ROLLERS

The MP5/10 and MP5/40 use the same locking rollers. All MP5/10s and MP5/40s are fitted with standard size 8.0mm rollers (without markings) but these rollers are smaller in height than those for the other roller locked H&K weapons. This was done by the designers in an effort to increase the feeding reliability of the MP5 with the 10mm and .40S&W cartridges by lowering the center of the bolt head and bring it into greater contact with the rim of the cartridge case. Undersize and oversize rollers are now available for use in the MP5/10 and MP5/40. Bolt gap range for the MP5/10 and MP5/40 are the same as that for the 9mm MP5, .25mm to .50mm.

LOCKING ROLLER HOLDER AND ROLL PIN

The wire locking roller holder (ID#221125) used in the new “Action 3” bolt heads for the 9mm MP5s and the roll pin (ID#200450) is also used in the MP5/10 and MP5/40. The old-style flat metal plate locking plate locking roller holder (ID#200449) is not interchangeable with the wire version and can, therefore, not be used in the MP5/10 or MP5/40 bolt head.

LOCKING PIECES

The locking pieces for MP5 are always different in weapons that differ in any of the following ways:

- Different caliber
- Different barrel length
- HI or LO impulse ammo (MP5/10 only)

The angles on the corners of the locking piece control the time and energy required to unlock the breech of the weapon after the round is fired. Locking pieces are marked on their top side according to the weapon they are to be used in, except for the locking piece for the MP5A2/A3/SF/N and HK94. You must not interchange locking pieces between dissimilar weapons. The correct locking pieces for the MP5/10 and MP5/40 are as follows:

Weapon	**Marking**	**Angle**
MP5/40	26	80 degree (old)
MP5/40	LO24	90 degree (new)
MP5/10 with LO impulse ammunition	LO24	90 degree
MP5/10 with HI impulse ammunition	HI25	60 degree

HI and LO impulse ammunition is classified and listed on the Reference Guide for HI/LO Impulse Loads for the MP5/10 SMG. While the impulse of the round is based on projectile weight and muzzle velocity, there are other factors that determine the classification of the round as “HI” or “LO” impulse. Consult this Reference Guide and the memorandum for its usage (copy attached) for further information concerning this subject.

3. Other component parts that are not interchangeable with those of the 9mm MP5's

1. Barrel
2. Receiver
3. Magazine catch spring
4. Magazine release lever
5. ALL Bolt catch parts (Unique to the 5/10 and MP5/40) to be modified.
6. Cocking lever support
7. Cocking lever
8. Cocking lever spring
9. Bolt carrier
10. Bolt head
11. Protective cap for threaded barrel
12. Ejector
13. Pistol grip, plastic
14. Trigger mechanism, complete
15. ALL magazine components (to be improved)

4. IMPROVED PARTS

The following items are currently being improved in the design department at HK GmbH, located in Germany. These parts will be incorporated into all new production MP5/10s and MP5/40s produced and/or delivered after 3/95. It is planned that these improvements will also be incorporated into existing MP5/10s and MP5/40s currently in the United States as the improved parts become available. This information below is current as of 3/28/95.

A. MP5/10 & MP5/40 MAGAZINES – As a result of the 2/31/95 drop tests of the newest magazine design, the metal inserts in the feed lips will be extended in length by .5mm and will be nitro gas hardened to prevent the spreading of the lips that occurred with the samples where the inserts were not hardened. These changes should address the problem of the somewhat fragile feed lips of these magazines.

In addition, the new style magazine have raised ribs along the back side and around the rear corners of the magazine housing in addition to those already found along the front edge. This is to prevent the magazine clamps from shearing off the ribs when the magazines are locked together with the dual magazine clamp.

The tab on the magazine follower that actuates the bolt catch has been changed in shape and length to be compatible with the new threaded screw that will replace the front roll pin on the bolt catch (see sub paragraph C below). This follower will interchange and work with existing roll pin design.

The magazine housing and floor plates are made with a semi-translucent gray/blue material. The ammo viewing holes on the back of the magazine are closed but visible for use to indicate

round count. Numerals are not found next to the closed holes (10, 20, and 30). The magazine follower is made from black polymer.

B. MP5/10 & MP5/40 EXTRACTOR - The extractor claw will be increased in width from the old thickness of 1.0mm to 1.4mm and is made from the same material. The silver, thinner, extractor spring with the raised center will be used with this new extractor. This new extractor will fit into existing bolt heads **but will require a clearance cut in the barrel**, like the HK21E (see subparagraph F below).

A roll pin will protrude from the back end of the extractor that will fit into the bolt head. This roll pin will fit into the existing unmodified bolt head and will limit the outward movement of the new extractor to prevent the extractor spring from being bent outward and damaged should the bolt group close on an empty case or misfed round.

C. BOLT CATCH – The front roll pin that is actuated by the tab on the magazine follower often shifts during use. This roll pin will be replaced in the new MP5/10s and MP5/40s with a threaded screw with a plastic locking "bolt" to prevent it from shifting (similar to the plastic bolt found in the mounting screw for the Rail and MSG90/HK21E mounts). This threaded screw is not only adjustable and easily replaceable, but it will also remain secure during prolonged use. This item can be retrofitted in existing weapons along with a modified axle (see subparagraph F below).

D. BOLT HEAD "CRACKS" – The machining fissure, visible along the feed lug of some of the first 600 MP5/10 & MP5/40 bolt heads, was not a crack and does not represent a durability or safety concern. New production bolt heads may still exhibit this production anomaly as there is little room in design of this part to eliminate this occurrence completely.

E. NEW RECOIL SPRING GUIDE ROD ASSEMBLY – A new recoil spring and larger outside diameter (8mm to 9mm) guide rod will be used in the new MP5/10s & MP5/40s. This will be used in place of the HK53 recoil spring guide rod assembly (RSGRA) recommended earlier by HK GmbH for the MP5/10 only to ensure more reliable feeding/closing/locking of the bolt. HK GmbH does not feel confident in the prolonged use of the HK53 RSGRA in these weapons.

With the larger diameter RSGRA, the tubular guide of the bolt carrier must be drilled out to accommodate this new assembly. This modification will be done during the upgrade of existing weapons described below in subparagraph F and will be in all newly produced weapons.

F. UPGRADE OF EXISTING MP5/10S & MP5/40S CURRENTLY IN THE USE – The improvements that will be incorporated into the new production MP5/10s & MP5/40s will be incorporated into the 600 weapons currently in use in the USA. These improvements include the improved extractor, bolt catch, recoil spring guide rod assembly, new magazines with improved followers, and the necessary clearance cut in the barrel for the longer extractor described above.

HK GmbH will forward enough parts to HK Inc. to upgrade all 600 weapons currently in the USA (300 MP5/10s and 300 MP5/40s).

ALSO TO BE AWARE OF:

- 10mm/.40S&W flash suppressor on the 9mm MP5 fits loosely and could affect accuracy.
- 9mm cartridges in a 10mm/.40 caliber bore is dangerous!

USE OF THE H&K MP5/10 SUBMACHINE GUN WITH HI & LO IMPULSE 10MM AUTO AMMUNITION

The **H&K MP5/10 Submachine gun** is unique in that it provides the operator with the ability to fire various types of 10mm Auto ammunition that encompass a wide range of performance unavailable in other rimless, non-magnum pistol cartridges. The 10mm Auto cartridge allows the use of projectiles ranging in weight from as light as 135 grains to as heavy as 220 grains with velocities anywhere from 900 to 1,600 feet per second. The MP5/10 will reliably handle all of this ammunition throughout this wide spectrum of ballistic performance.

To insure maximum reliability and durability of the weapon, there are two available locking pieces for use in the MP5/10. The MP5/10 is supplied with only one locking piece and are normally shipped with the **"LO" impulse locking piece (ID#205189)** installed. An optional **"HI" impulse locking piece (ID#205282)** is available for purchase from H&K for use in the MP5/10 when firing HI impulse ammunition. (This information does not apply to the H&K MP5/40 submachine gun chambered for the .40 S&W cartridge as the limited case capacity of this round cannot provide the performance range that the 10mm Auto cartridge does**). It is the responsibility of the use to insure that the correct locking piece is used in the weapon for the type of ammunition being fired.**

The word "impulse" describes the amount of recoil energy imparted to the bolt group of the MP5 when the cartridge is fired. Impulse varies from one cartridge type to another based on many factors. Some of these factors include projectile weight, muzzle velocity, chamber pressure, peak chamber pressure, and barrel length though there can be other factors that influence the impulse of the round, e.g. ambient temperature, etc. The MP5/10, like all weapons, is designed to make optimum use of the recoil impulse of the round or rounds that it will fire. Optimum impulse in the MP5 submachine gun will ensure that the bolt group is driven rearward in the receiver far and fast enough to provide reliable operation yet not too far rearward that the bolt group strikes the back plate of the buttstock thus accelerating the wear and tear on component parts of the weapon. (Under perfect conditions the bolt group of the MP5/10 will stop ½ - 1 inch from the back plate or buffer in the buttstock during its rearward travel.)

Obviously, different cartridge types create different levels of recoil impulse. This factor will cause the bolt group to recoil rearward within the receiver to varying degrees from one type of ammunition to another. The amount of rearward travel of the bolt group of the MP5/10 can be regulated by selecting the appropriate locking piece that will ensure optimum function for the type of ammunition being used. We classify the two types of 10mm Auto ammunition, as being "LO impulse" or "HI impulse". When firing the HI impulse ammunition, the HI impulse locking piece, marked AHI 25" on the top side of the locking piece, should be used. Conversely, when firing LO impulse ammunition, the "LO" impulse locking piece, marked "LO 24" should be installed in the weapon.

The angle of the front corners of the locking pieces for different HK roller-locked weapons vary from one locking piece to the other. This angle plays an important role in the unlocking of the bolt after ignition of the cartridge. The angle of the locking piece interacts with the locking

rollers in the bolt head and the angles of the locking roller recesses in the barrel extension of the weapon to delay the opening of the breech after ignition of the cartridge long enough to allow the projectile to leave the barrel and the pressure in the bore and the chamber to drop to a safe level. Varying the angles on the front corners of the locking piece changes the amount of this delay and subsequently the amount of recoil impulse imparted to the bolt group which in turn, as discussed earlier, determines how far rearward the bolt group will travel.

SELECTING THE CORRECT LOCKING PIECE

First, the type of ammunition to be used must be determined, either HI or LO impulse. HK has tested and classified various common types of 10mm Auto ammunition (see reference guide). If your load is listed on this guide, use the locking piece that is recommended. If not, compare the projectile weight and muzzle velocity of the round that you are using with those on the list. Once you have found the closest match, use the locking piece that is recommended for that round. If you have a particular 10mm Auto duty load that you would like to use in the MP5/10 that is not on the reference guide, contact HK for further guidance. It may have been classified but does not appear on the reference guide.

If the 10mm round that you are using does not closely match any of those on the reference guide you can use this basic rule of thumb to get started. If the 10mm ammunition you are using has a muzzle velocity exceeding 1,100 feet per second from the MP5/10, consider this ammunition a HI impulse load and use the HI impulse locking piece. If the ammunition exhibits a muzzle velocity under 1,100 feet per second, it is most likely a LO impulse load and you should use the LO impulse locking piece.

USE OF THE INCORRECT LOCKING PIECE

There are various signs to watch for which may indicate that the incorrect locking piece is being used in the weapon for the type of ammunition being fired. Keep in mind that poor function of the weapon could also be caused by other factors, such as unserviceable parts or poor quality ammunition. Follow the guidance contained herein to ensure that the correct locking piece is used in the MP5/10 at all times or damage to the weapon may result and would not be covered under warranty.

Signs of Under Function (Not enough impulse)

- **Failure to eject empty cartridge cases**
- **Weak ejection of cartridge case (cases just getting out or less than 2 ft. from the weapon)**
- **Very light or non-existent flute marks on the empty cartridge cases**
- **Wimpy recoil**
- **Slower than expected rate of fire in fully automatic mode**
- **Bolt does not lock open on the last round fired**
- **Round does not feed from the magazine**

Corrective Action for Under function

If you believe there is under function in the weapon based upon the signs listed above, check to see if the “HI” impulse locking piece is installed. If so, exchange it for the “LO” impulse locking piece and note the difference in function. Beware of the signs of over function below. A weapon improperly fitted with a “HI” impulse locking piece when shooting “LO” impulse ammunition may exhibit less than perfect functional reliability which may manifest itself as failures to eject, feed, and/or lock. There are absolutely no safety or durability concerns if the weapon is fitted with the “HI” impulse locking piece and “LO” impulse ammunition is used.

SIGNS OF OVER FUNCTION (too much impulse)

- **Excessive recoil and/or ejection of empty cartridge cases**
- **Visible damage to the metal back plate of the fixed buttstock or the rubber buffer in the retractable buttstock. This damage will be visible as the bolt carrier striking the back plate or rubber buffer leaving “witness” marks or breaking away parts of the rubber buffer**
- **Small bulges in the rear of the receiver from the locking rollers being forced out of the bolt head when the bolt carrier strikes against the back plate of the buttstock**
- **Signs of excessive pressure in the cartridge cases, such as very pronounced or raised flute marks or primers that are flattened or backed out of the cartridge case, failures to extract, or torn cartridge case heads**

Corrective Action for OVER FUNCTION

If you believe that there is OVER FUNCTION in the weapon based on the signs listed above, check to see if the “LO” impulse locking piece is installed. If so, exchange it for the “HI” impulse locking piece and note the difference in function. Beware of the signs of Under function above. A weapon improperly fitted with a “LO” impulse locking piece when shooting “HI” impulse ammunition may exhibit less than perfect functional reliability which may show up as failures to extract and/or eject. Additionally, this scenario can result in permanent damage to the weapon that will not be covered in the warranty. **It is the responsibility of the user to ensure the correct locking piece is used in the weapon**. This damage could be damage to the back plate or rubber buffer in the buttstock, damage to the bolt carrier or damage to the receiver of the weapon. This damage will occur over time if the weapon is fired with the incorrect locking piece installed. There are absolutely no safety concerns if the weapon is fitted with a “LO” impulse locking piece and “HI” impulse ammunition is fired.

MIXING HI AND LO IMPULSE AMMUNITION

Most users of the HK MP5/10 submachine gun will elect to fire one type of duty ammunition. However, the unique unmatched range of ballistic and terminal performance offered by the 10mm Auto cartridge in the MP5/10 provides the user with the option of utilizing a wide range of available ammunition types for specific applications. No other pistol caliber machine gun in the world can offer the tactical flexibility and enhanced lethality of the MP5/10.

If it is a requirement or desire of your organization to issue and fire two types of ammunition through the MP5/10, you must select the appropriate locking piece for the two types of loads being fired or exchange the locking piece when switching from the "HI" to "LO" impulse ammunition. Obviously, if the two types are different in their impulse the choice becomes one of inconvenience of having to swap locking pieces when switching ammunition versus accepting the risk of accelerated wear and tear or damage to the weapon and reduced functional reliability by using the incorrect locking piece.

While it **is not recommended by HK**, some users of the MP5/10 will install the "HI" impulse locking piece in their MP5/10 and shoot both "HI" and "LO" impulse ammunition through the weapons interchange ability without functional problems (depending upon the ammunition used and the condition of the weapon). The use of the "HI" impulse locking piece when firing "LO" impulse ammunition will prevent permanent damage and/or accelerated wear and tear on the MP5/10. However, this procedure could reduce functional reliability of the weapon below what it would be if the weapon was fitted with the appropriate "LO" impulse locking piece. Only the user can decide if this scenario is acceptable based on their own testing of the weapon with the ammunition types they plan to use. **Never fire the MP5/10 with "HI" impulse ammunition with the "LO" impulse locking piece installed unless it is an emergency, as damage to the weapon can result**.

DO'S AND DON'TS

- **DO** insure the correct locking piece is installed in the weapon based upon the type of ammunition you want to fire. (See reference guide)

- **DO** look for signs of OVER FUNCTION and Under function and take corrective action as described above.

- **DO NOT** mix "HI" and "LO" impulse ammunition in the weapon unless you exchange the locking piece as required.

- -**DO NOT** load and/or fire any ammunition in the MP5/10 that is not "10mm Auto".

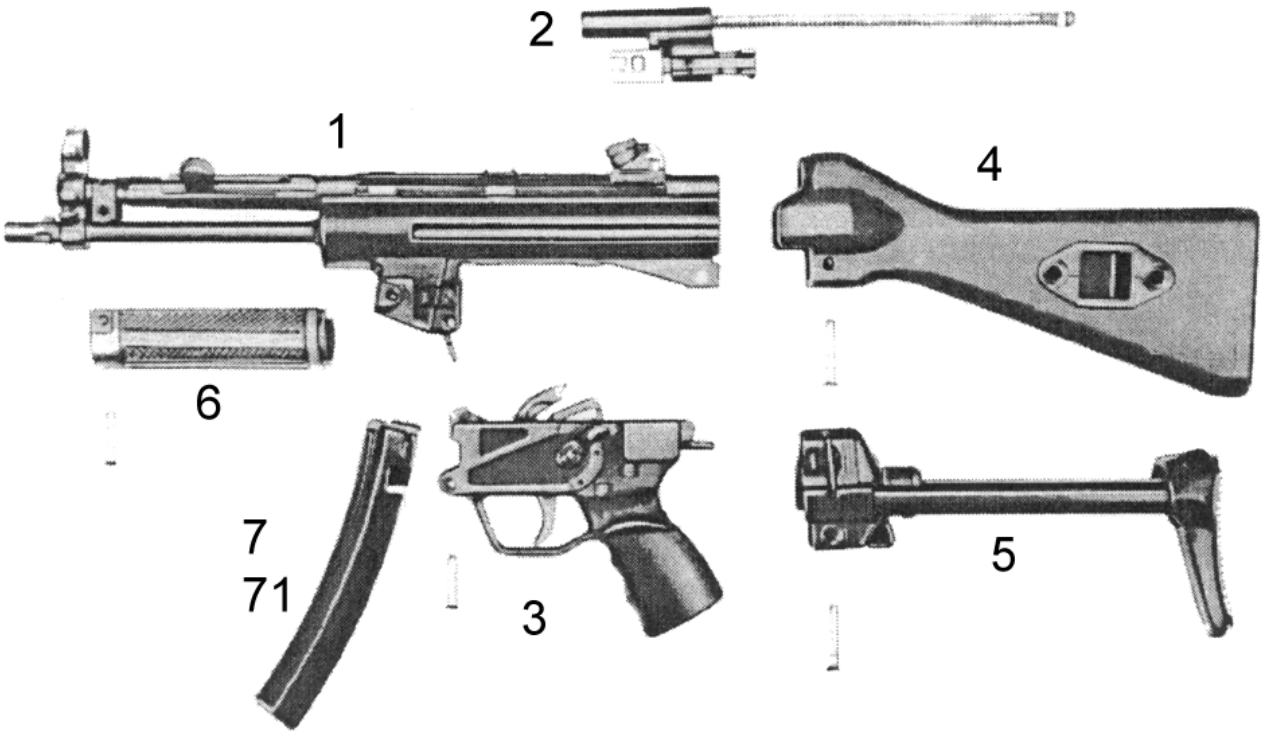
REFERENCE GUIDE FOR HI AND LO IMPULSE LOADS FOR THE MP5/10 SMG

LOW IMPULSE AMMUNITION

Manufacturer	Bullet Wght & Type	Mfc Code	Muzzle Velocity*	Lock. Piece
1. Federal	180 gr. JHP	XM1001	989	LO24
2. Federal	180 gr. JHP	XM1001A	1042	LO24
3. Winchester	180 gr. JHP	Subsonic RA 10 mm	983	LO24
4. Remington	200 gr. MC	R10mm2	1104	LO24
5. PMC	170 gr. JHP	10B	1329	LO24
6. PMC	200 gr. FMC-TC	10A	1132	LO24
7. Masters	170 gr. SWC	MC10SWCN	1051	LO24

HI IMPULSE AMMUNITION

Manufacturer	Bullet Wght & Type	Mfc Code	Muzzle Velocity*	Lock. Piece
1. Winchester	175 gr. STHP	X10MMSTHP	1377	HI 25
2. Norma	200 gr. FMJ	11001	1195	HI 25
3. Norma	170 gr. JHP	11002	1461	HI 25
4. Masters	150 gr. JHPN	MC10JHPN	1481	HI 25
5. Hornady	155 gr. JHP	9122	1445	HI 25
6. Hornady	170 gr. JHP	9125	1406	HI 25
7. Hornady Custom	200 gr. FMJ	9128	1124	HI 25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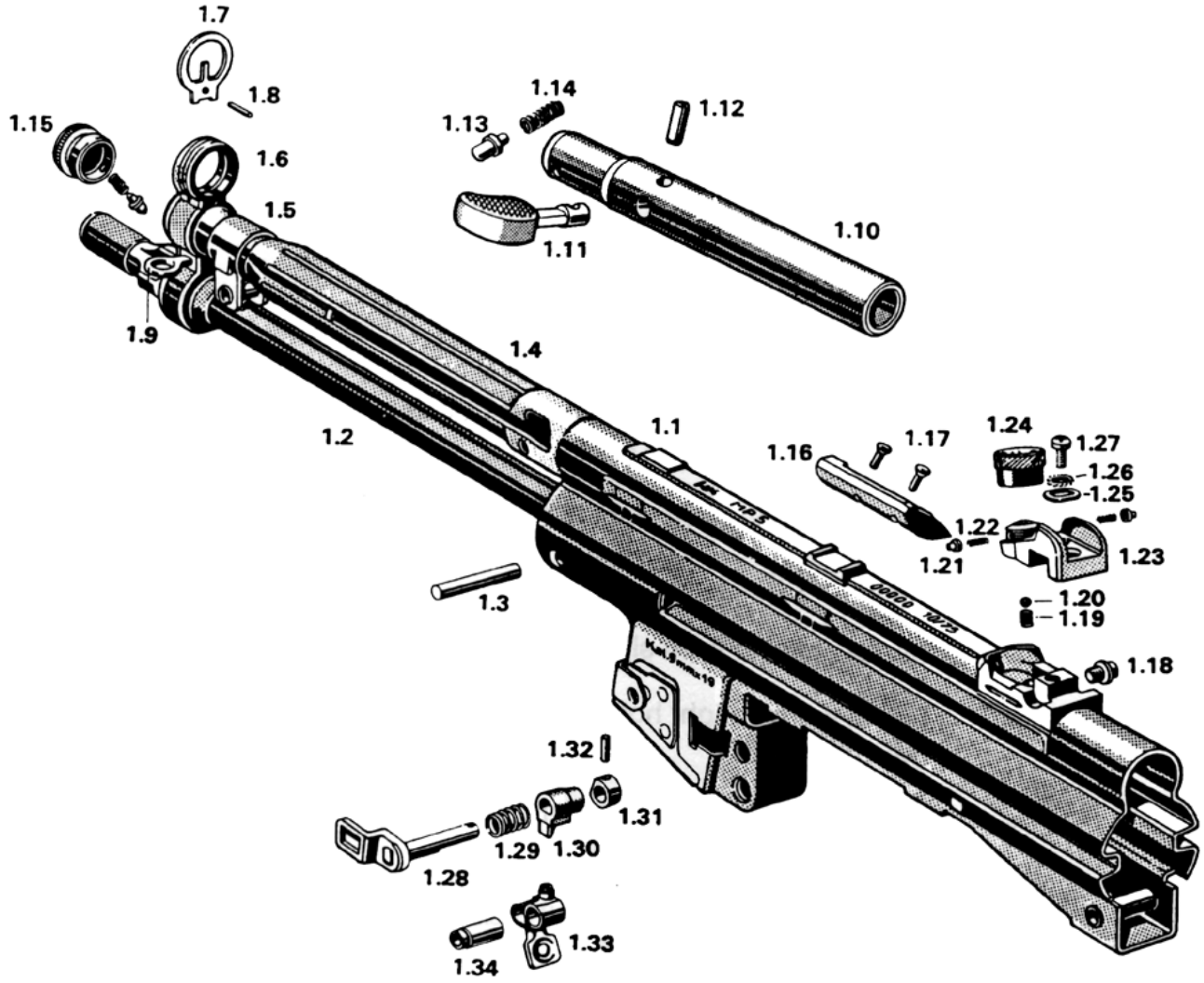
ASSEMBLY GROUPS
MP5 SUBMACHINE GUN
Illustration #1

Item #	Parts Description	Part#
1	Receiver w/barrel, front sight holder, and magazine release lever (MP5A2/A3/SF)	206615
2	Bolt group, complete (MP5A2/A3/N)	201502
*	Bolt group, complete (MP5K/KN)	206414
3	“SEF” trigger group w/safety selector lever and trigger mechanism (MP5A2/A3/SD)	206229
*	“SEF” trigger group w/safety selector lever and trigger mechanism (MP5K)	206542
4	Buttstock, fixed	205586
5	Buttstock, retractable (9mm)	225586
*	Buttstock, retractable (10mm/.40 S&W) Note: can also be used on 9mm MP5’s	214278
6	Forearm, slim line (MP5A2/A3)	224007
*	Forearm, wide (Standard for MP5A2/A3/N/SF)	206657
*	Handguard (MP5SD)	206472
*	Vertical foregrip (MP5K/KN/PDW)	206421
7	Magazine, 30 round (9mm) w/LE markings	215608
*	Magazine, 30 round (10mm/.40S&W) w/LE markings	
7.1	Magazine, 15 round w/LE markings	215610
8	Multi-purpose sling (MP5A2/A3/SD/N/SF)	205506
*	Ambidextrous carrying sling (MP510/.40) Note: requires mounting pins See “Miscellaneous Items” list, page 34	205213 #700148 &700154
*	Leather carrying sling	200574
*	MP5K “Loop” sling (hooks to buttcap)	222323

* Denotes items not shown in illustration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BARREL with RECEIVER
MP5-illustration #2

Item#		Parts Description	Part #
1.1		Receiver w/barrel, cocking lever housing and front sight holder (MP5A2/A3)	206234
*		Receiver w/barrel, cocking lever housing and front sight holder (MP5N)	225219
*		Receiver w/barrel, cocking lever housing and front sight holder (MP5SD)	206722
*		Receiver w/barrel, cocking lever housing and front sight holder (MP5K)	206541
*		Receiver w/barrel, cocking lever housing and front sight holder (MP5/10)	205098
*		Receiver w/barrel, cocking lever housing and front sight holder (MP5/40)	205272
1.2	#	Barrel only, no front sight holder (MP5A2/A3)	201590
*	#	Barrel (MP5SD)	205920
*	#	Barrel only, no front sight holder (MP5K)	206420
*	#	Barrel w/front sight holder and eyebolt, black (MP5A2/A3/SF)	214896
*	#	Barrel w/front sight holder, thread cap and eyebolt black (MP5N)	214426
*	#	Barrel w/front sight holder, thread cap and eyebolt black (MP5KN)	214428
*	#	Barrel w/front sight holder, thread cap and eyebolt black (MP5/10)	214142
*	#	Barrel w/front sight holder, thread cap and eyebolt black (MP5/40)	214422
1.3		Barrel pin, 5.0mm (standard Barrel pin, 5.015mm Barrel pin, 5.03mm Barrel pin, blank, 5.1mm	200437 201262 225161 922019
1.4		Cocking lever housing complete	201573
1.5		Holding clip with bush	200418
1.6		Front sight holder with front sight	201561
1.7		Front sight	200415
*		Front sight with tritium dot and ring (all MP5's)	700126

BARREL with RECEIVER

Item#	Parts Description	Part #
1.8	Clamping sleeve	922609
1.9	Eyebolt	201241
1.10	Cocking lever support, complete (MP5A2/A3/SD)	205906
*	Cocking lever support, complete (MP5K)	206423
1.11	Cocking lever, complete (MP5A2/A3/SD/N/SF)	205905
1.12	Clamping sleeve	922609
1.13	Catch bolt	205910
1.14	Spring for catch bolt	202495
1.15	Cap, complete, cocking tube (aluminum)	200385
1.15	Cap, complete, cocking tube (steel)	206497
1.16	Cartridge case deflector	201526
1.17	Rivet for cartridge case deflector	201527
1.18	Screw, windage adjustment	200384
1.19	Ball spring	200383
1.20	Ball (3mm)	929897
1.21	Catch bolt	200381
1.22	Spring for catch bolt	200382
1.23	Rear sight support	200375
1.24	Rear sight cylinder (MP5A2/A3/SD/N/MP510 &40)	201542
*	Rear sight cylinder (MP5K/KN/PDW)	206415
*	Rear sight complete (MP5A2/A3/SD/MP510&40)	201515

BARREL with RECEIVER

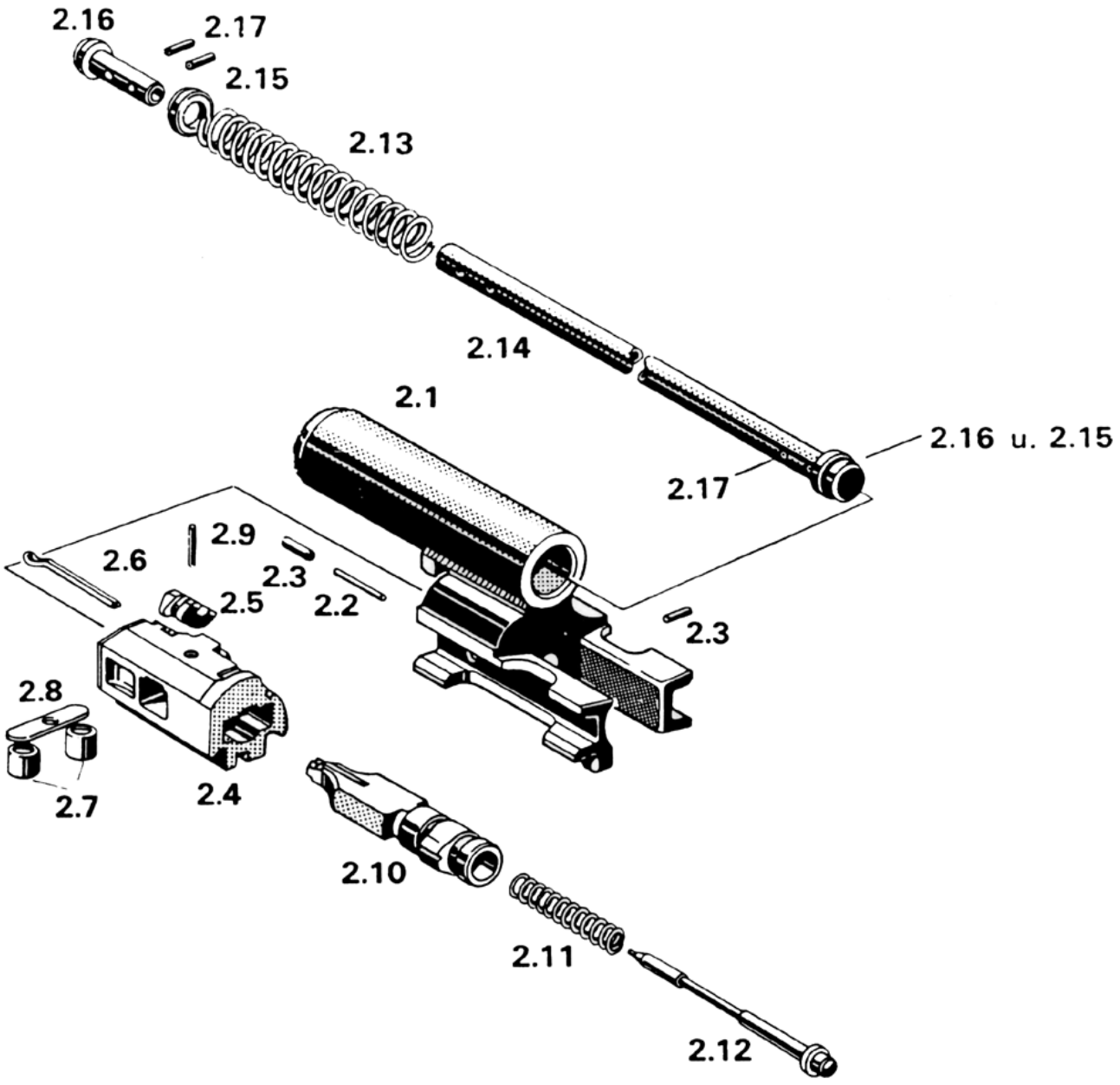
Item#	Parts Description	Part #
*	Rear sight complete (MP5K/KN/PDW)	206407
*	Spare parts set for rotary rear sight (Consists of items 1.18, 1.19, 1.20, 1.25, 1.26, 1.27	200988
1.25	Washer, oval, rear sight	200371
1.26	Toothed lock washer	922617
1.27	Clamping screw	200372
1.28	Magazine catch, complete	206228
1.29	Compression spring for magazine catch (MP5A2/A3/SD/N/K)	200393
*	Compression spring for magazine catch (MP510/40)	205100
1.30	Contact piece for magazine catch	201517
1.31	Push button for magazine catch	200396
1.32	Clamping sleeve	922608
1.33	Magazine release lever, complete (MP5A2/A3/SD/N/K)	201513
*	Magazine release lever (MP5 10/40) (w/out 205100 spring)	205099
1.34	Bushing for magazine release lever	200397
1.35	Axle, bolt catch, 2X8mm (MP5 10/40)	205101
1.36	Clamping sleeve, 2X8mm (MP5 10/40)	980717
1.37	Bolt catch lever (MP5 10/40)	205102
1.38	Clamping sleeve, 2X6mm (MP5 10/40)	928574
1.39	Elbow spring (MP5 10/40)	205103
1.40	Cocking lever support (MP5 10/40)	205310
1.41	Compression spring (MP5 10/40)	205314

BARREL with RECEIVER

Item#	Parts Description	Part #
1.42	Cocking lever (MP5 10/40)	205308
1.43	Clamping sleeve (MP5 10/40)	922609
1.44	Protective cap for muzzle threads, 9mm (MP5N/KN/PDW)	225217
1.44	Protective cap for muzzle threads, 10mm & 40S&W (MP5 10/40)	205283
1.45	Detente, for cocking lever tube cap	200387
1.46	Spring for cocking lever tube cap détente	200388

* Denotes item(s) not pictured in illustration.

\# Denotes Barrels may only be purchased for installation at H&K, Inc. At an additional cost for labor. H&K, Inc. Can only install barrels as listed above with front sight holders, eyebolt and in black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BOLT GROUP

Item #	Parts Description	Part #
2.1	Carrier, bolt head (MP5A2/A3/SD/N/SF)	201594
*	Carrier, bolt head (MP5K/KN)	206413
*	Carrier, bolt head (MP5 10/40)	205117
2.2	Stop pin	201597
2.3	Clamping sleeve, 2X5mm	205597
2.4	Bolt head, old style, incomplete w/o roller, extractor, etc. (Uses plate roller holder #200449) (MP5A2/A3/SD/N/SF) (Limited availability, replaced by #205489	201609
*	Bolt head, new style for action 3 ammo, complete (Uses wire roller holder #221125) (MP5A2/A3/K/SD/N/SF)	205595
*	Bolt head, complete w/all parts (MP5 10/40)	205121
2.5	Extractor (9mm)	201610
*	Extractor (10mm/40S&W)	205123
2.6	Spring, extractor	206645
2.7	Roller, locking, 7.96mm (9mm) Roller, locking, 7.98mm (9mm) Roller, locking, 8.00mm, std. size (9mm) Roller, locking, 8.02mm (9mm) Roller, locking, 8.04mm (9mm)	200007 222232 200446 200447 200448
*	Roller, locking, 7.96mm (MP5 10/40) Roller, locking, 7.98mm (MP5 10/40) Roller, locking, 8.00mm, std. size (MP5 10/40) Roller, locking, 8.02mm (MP5 10/40) Roller, locking, 8.04mm (MP5 10/40)	214870 214871 205124 214872 214873
2.8	Holder for locking rollers, plate (for bolt head #291609) (Cannot be used in new style Action 3 bolt heads #201595 & #205489)	200449
2.8A	Holder for locking rollers, wire (for new style Action 3 bolt head #205489 & 201595 and for MP5 10/40 bolt head #205121) (Cannot be used in old style bolt head #201609)	221125

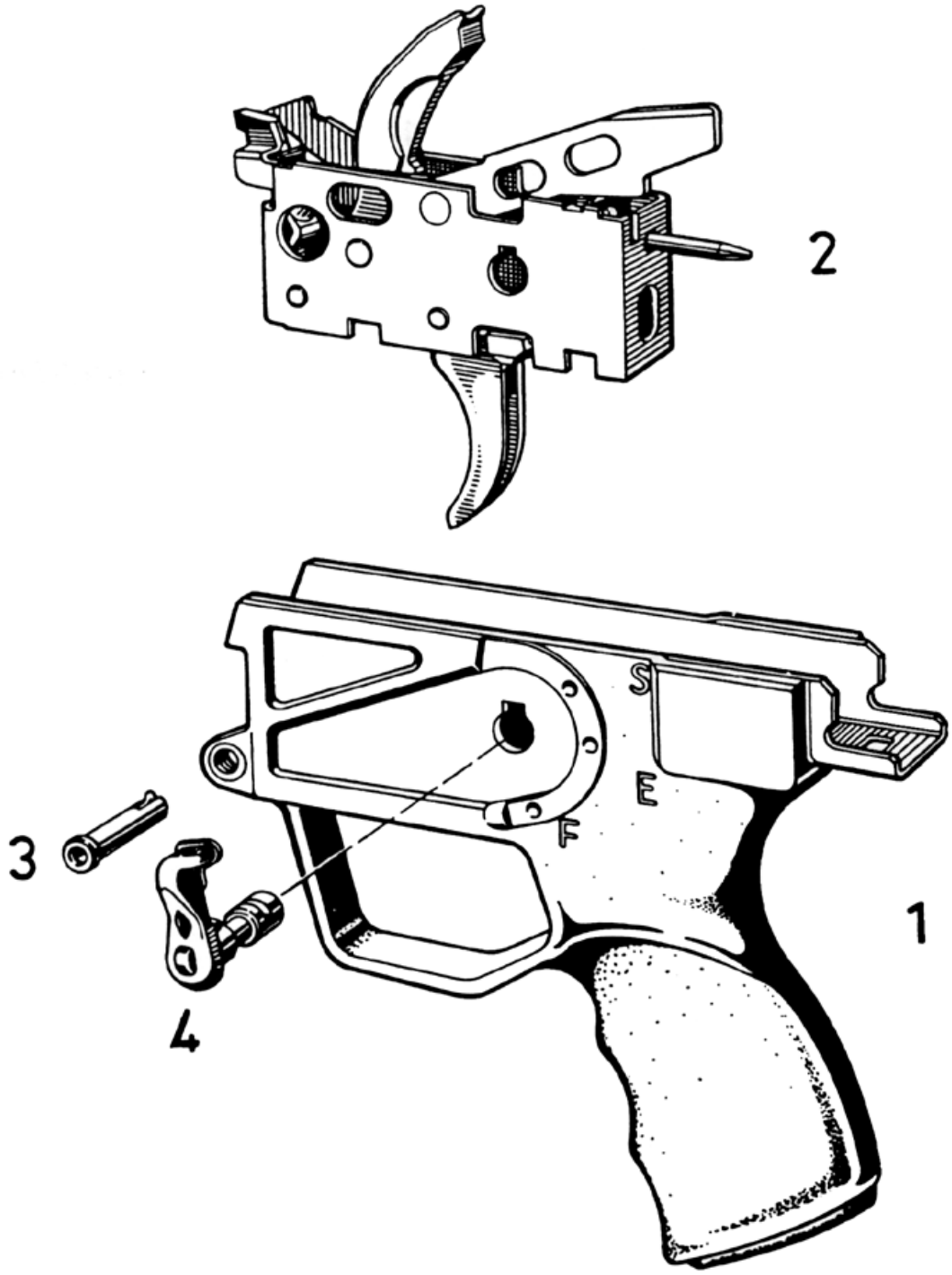
BOLT GROUP

Item #	Parts Description	Part #
2.9	Clamping sleeve	200450
2.10	Locking piece, 100E, (MP5A2/A3/N/SF)	201599
	Locking piece, 110E, (MPK/KN/PDW w/o sound suppressor), marked “A16”	224786
	Locking piece, 80E, (MP5K/PDW) w/sound suppressor marked “80E”	214292
	Locking piece, 120E, (MP5SD), marked “A5”	205929
	Locking piece, HI impulse, 60E, (MP 10) marked “AHI 25”	205282
	Locking piece, LO impulse, 90E, (MP 10) marked “ALO 24”	205189
	Locking piece, 80E, (MP5 40) marked “26”	205355
2.11	Spring, firing pin	201601
2.12	Firing pin	201601
*	Recoil spring assembly, complete (MP5A2/A3/SD/N/SF/10/40)	205596
*	Recoil spring assembly, complete (MP5K/KN)	206400
*	Recoil spring assembly, complete (MP5 10)	203414
2.13	Recoil spring (MP5A2/A3/SD/N/SF/40)	201603
*	Recoil spring (MP5 10)	203416
*	Recoil spring (MP5K/KN)	206391
2.14	Recoil spring guide rod (MP5A2/A3/SD/N/SF/40)	201604
*	Recoil spring guide rod (MP5 10)	203415
*	Recoil spring guide rod (MP5K/KN)	206401
2.15	Guide rod	200524
2.16	Stop pin for recoil spring (MP5A2/A3/SD/N/SF/K/KN/40)	205603

BOLT GROUP

Item #	Parts Description	Part #
*	Stop pin for recoil spring (MP5 10)	200523
2.17	Rivet (2 ea.)	200526
*	Repair kit for recoil spring assembly for 9mm & 40 S&W MP5's (consists of (1 ea.) 2.15, (1 ea.) 2.16 and (2 ea.) 2.17	20092

* Denotes item(s) not pictured in illustration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"SEF" TRIGGER GROUP
with SAFETY/SELECTOR LEVER AND TRIGGER MECHANISM
illustration #4

Item #	Parts Description	Part #
1	Grip only (MP5A2/A3/SD)	201628
*	Grip only (MP5K)	206404
2	Trigger mechanism, complete w/o grip	206235
3	Locking pin, complete	200459
4	Safety/selector lever, complete	221202

NOT SHOWN OPTIONAL TRIGGER GROUPS

Single fire (SF) ambidextrous trigger group, fits MP5A2/A3/SD/N	225522
Single fire (SF) ambidextrous trigger group, fits MP5 10/40	205278
Single fire & 2 round burst only, ambidextrous trigger, fits MP5A2/A3/SD/N	214080
Single fire & 2 round burst only, ambidextrous trigger, fits MP5 10/40	205125
Single fire & 2 round burst only, ambidextrous trigger, fits MP5K/KA1/KN/PDW	214107
Single fire & 3 round burst only, ambidextrous trigger, fits MP5A2/A3/N/SD	205028
Single fire & 3 round burst only, ambidextrous trigger, fits MP5 10/40	205280
Single fire & 3 round burst only, ambidextrous trigger, fits MP5K/KA1/KN/PDW	225967
Navy ambidextrous trigger group, fits MP5A2/A3/SD/N	225188
Navy ambidextrous trigger group, fits MP5 10/40	205279
Navy ambidextrous trigger group, fits MP5K/KA1/KN/PDW	225218
2 round burst ambidextrous trigger group, fits MP5A2/A3/SD/N	214081
2 round burst ambidextrous trigger group, fits MP5 10/40	214130
2 round burst ambidextrous trigger group, fits MP5K/KA1/KN/PDW	214108
3 round burst ambidextrous trigger group, fits MP5A2/A3/SD/N	225002
3 round burst ambidextrous trigger group, fits MP5 10/40	205281
3 round burst ambidextrous trigger group, fits MP5K/KA1/KN/PDW	224818

* Denotes item(s) not pictured in illustration.

NOTES ON TRIGGER GROUPS

Single fire (SF) – available for MP5A2/A3/N/SD/10/40 SMG's. Provides the operator with ambidextrous safety/selector levers for right and left hand use. Allows the following modes of operation: SAFE & SINGLE (Semi-automatic).

Single fire & 2-round burst – available for all MP5 SMG's. Provides the operator with ambidextrous safety/selector levers for right and left hand use. Allows the following modes of operation: SAFE & SINGLE (Semi-automatic) and 2-round burst.

Single fire & 3-round burst – available for all MP5 SMG's. Provides the operator with ambidextrous safety/selector levers for right and left hand use. Allows the following modes of operation: SAFE & SINGLE (Semi-automatic) and 3-round burst.

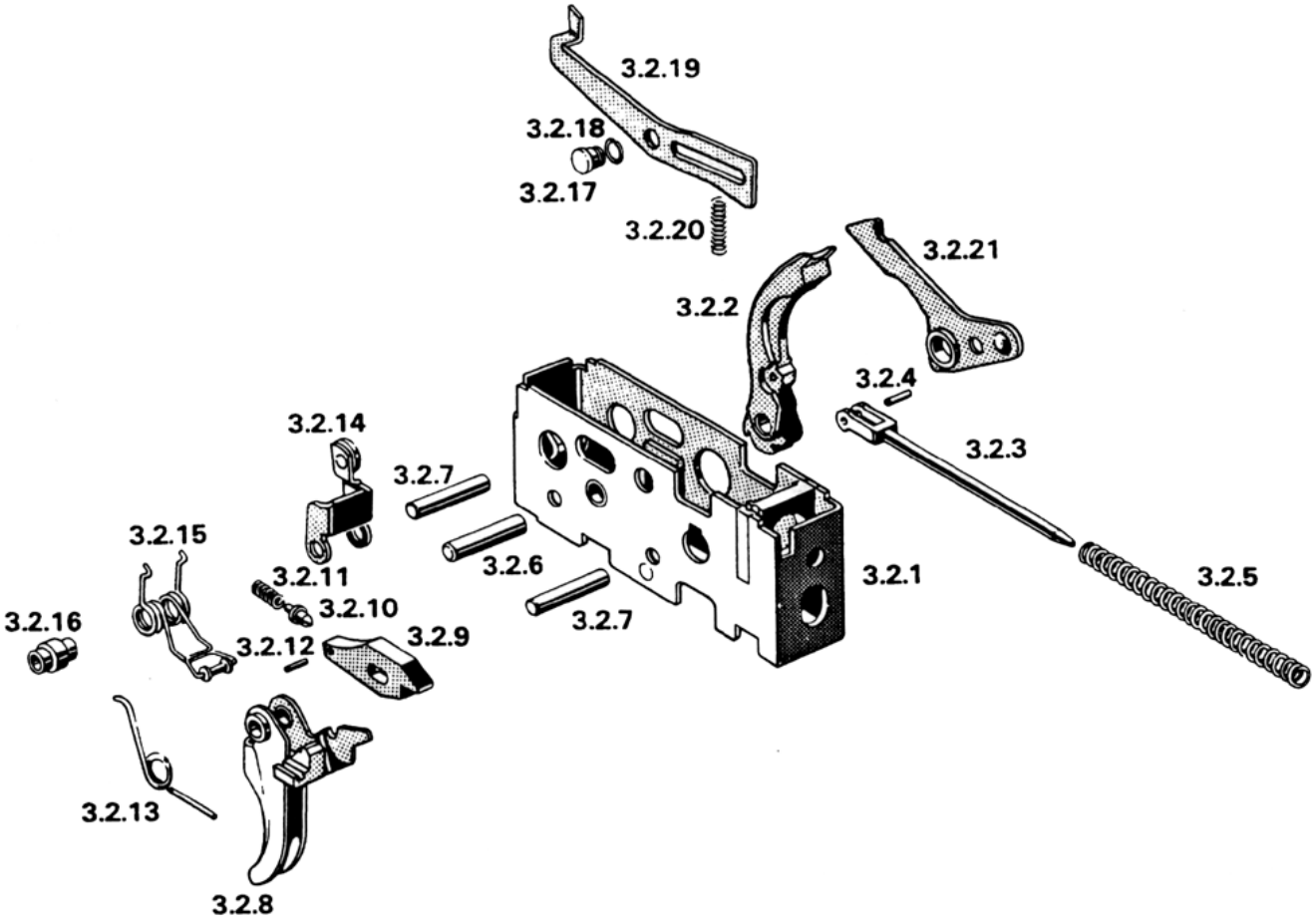
Navy (NT) – available for all MP5 SMG's. Provides the operator with ambidextrous safety/selector levers for right and left hand use. Allows the following modes of operation: SAFE & SINGLE (Semi-automatic) and SUSTAINED (Full automatic).

2-round burst (2rb) – available for all MP5 SMG's. Provides the operator with ambidextrous safety/selector levers for right and left hand use. Allows the following modes of operation: SAFE & SINGLE (Semi-automatic), 2-round burst and SUSTAINED (Full automatic).

3-round burst (3rb) – available for all MP5 SMG's. Provides the operator with ambidextrous safety/selector levers for right and left hand use. Allows the following modes of operation: SAFE & SINGLE (Semi-automatic), 3-round burst and SUSTAINED (Full automatic).

Unless otherwise noted, all HK SMG's are supplied with the standard trigger group (commonly called the "SEF"), with a single left side safety/selector lever with safe, single and sustained fire modes. See page 2 in this parts list for the part numbers of the SEF trigger groups. Optional trigger groups can also be purchased as accessories separate from the weapon.

MP5-SF carbines can be fitted with the optional select fire trigger groups above, but the weapons must be assembled with the bolt carrier from the select fire MP5A2/A3 (ID# 201594).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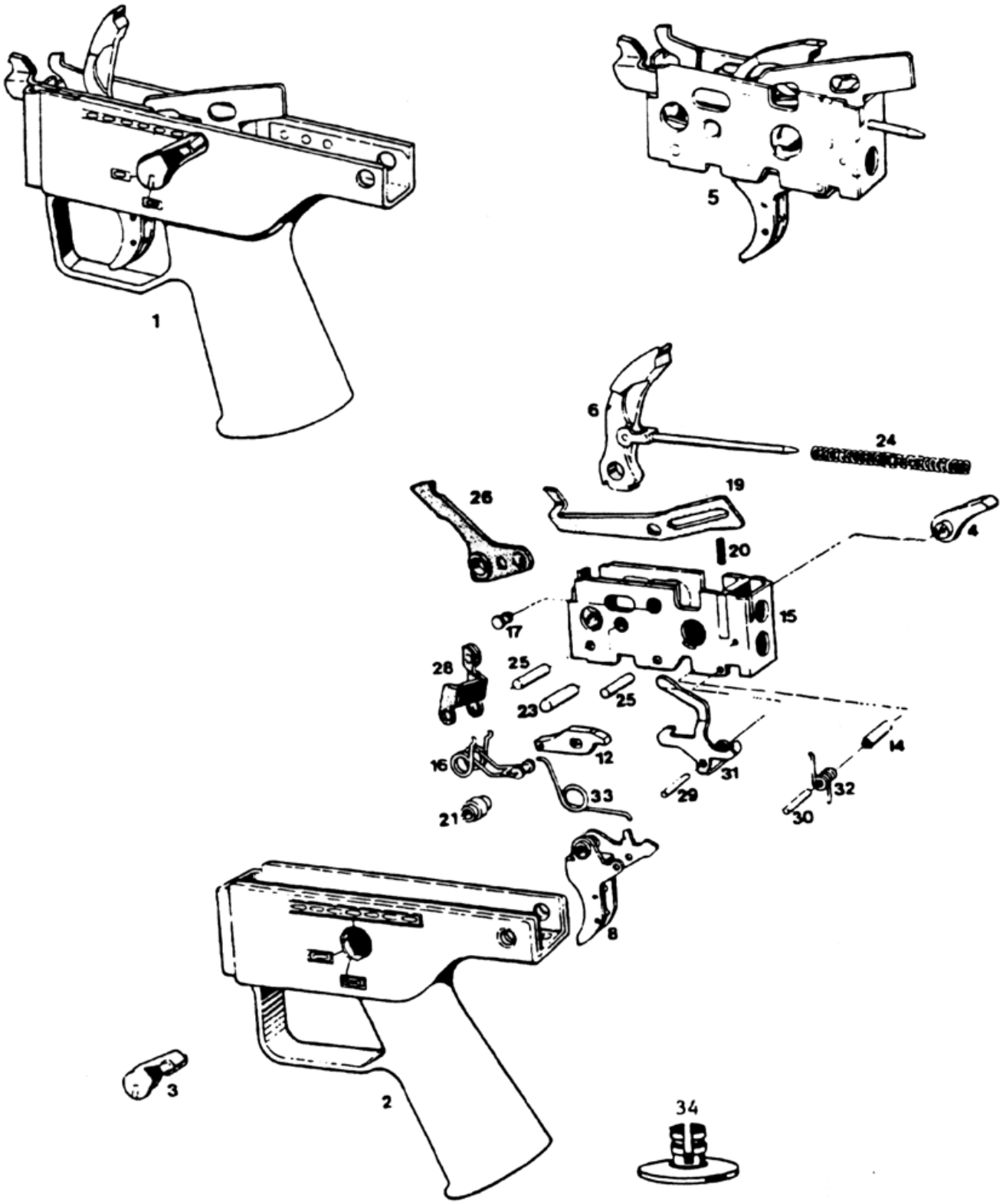
TRIGGER MECHANISM (SEF)
Illustration #5

Item #	Parts Description	Part #
3.2.1	Trigger housing	205657
3.2.2	Hammer w/pressure shank, complete	205569
3.2.5	Hammer spring	201538
3.2.6	Hammer axle	200494
3.2.7	Axle for trigger and catch	200482
3.2.8	Trigger, complete	205629
3.2.9	Sear	200490
3.2.10	Trigger bolt	200492
3.2.11	Compression spring to sear	200493
3.2.12	Clamping sleeve	200450
3.2.13	Elbow spring for trigger	200483
3.2.14	Catch with roller	200871
3.2.15	Elbow spring with roller	200505
3.2.16	Distance sleeve for catch	200504
3.2.17	Ejector axle	200480
3.2.18	Spring ring for ejector axle	200481
3.2.19	Ejector (9mm)	201639
3.2.20	Ejector spring	200478
3.2.21	Release lever, complete	202054

* Denotes item(s) not pictured in illustration.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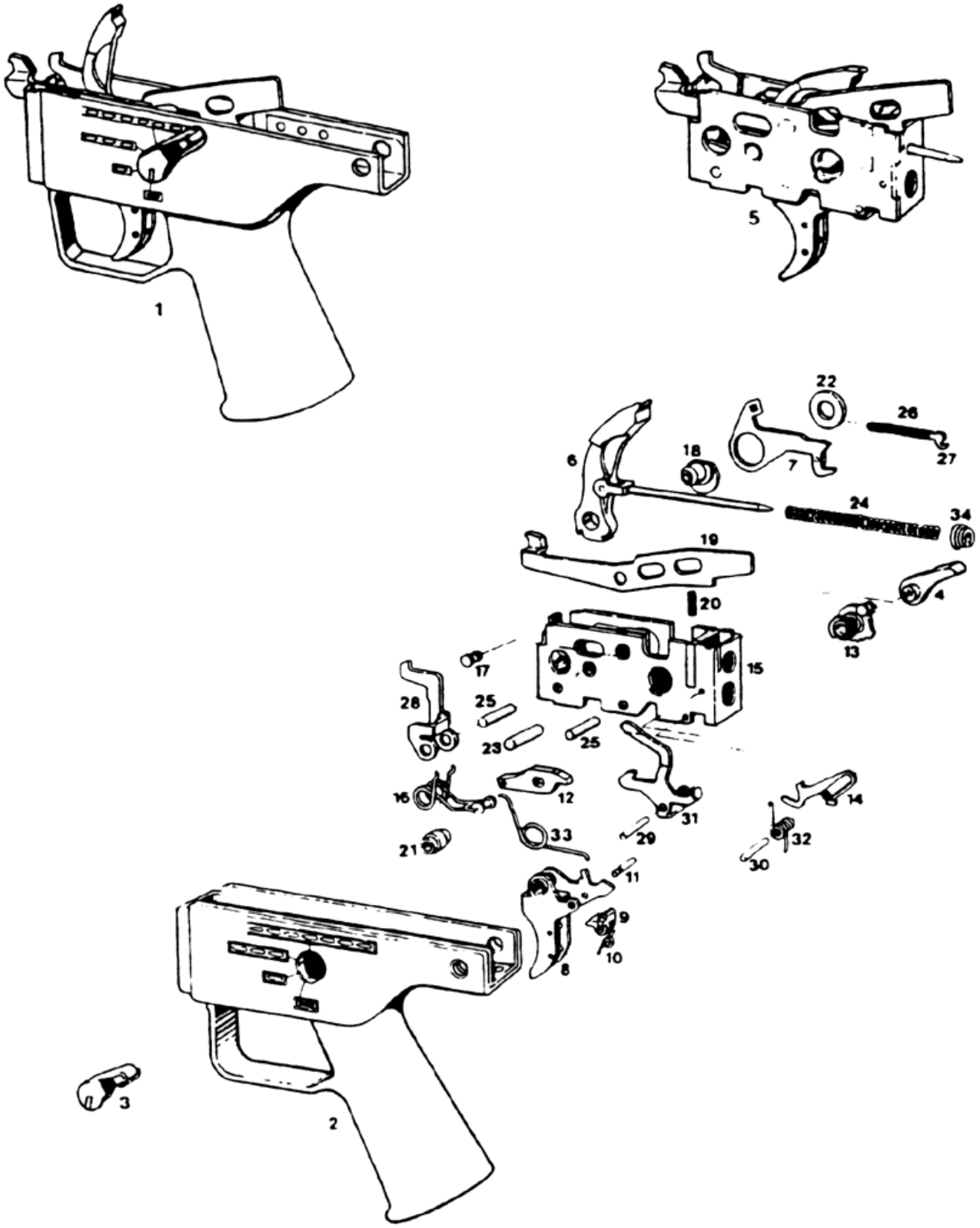
AMBIDEXTROUS TRIGGER GROUP with SAFETY/SELECTOR LEVER AND TRIGGER MECHANISM illustration #5A

Item#	Parts Description	Part #
1	Trigger group, complete (MP5N/SDN)	225188
1	Trigger group, complete (MP5KN)	225218
2	Grip only (MP5N/SDN)	225204
2	Grip only (MP5KN)	22520
2	Grip only (MP5SF)	225523
3	Safety/selector lever with axle (left)	225211
3	Safety/selector lever with axle left (MP5SF)	225526
4	Safety/selector lever (right)	225089
5	Trigger mechanism complete	225205
5	Trigger mechanism complete (MP5SF)	225524
5	Trigger mechanism complete (MP5 10/40)	205279
6	Hammer with pressure shank	205569
8	Trigger, complete	225209
8	Trigger, only (MP5SF)	225525
12	Sear, complete	200489
14	Bushing	225206
15	Trigger housing (bare)	225207
15	Trigger housing, bare (MP5SF)	225530
16	Elbow spring with rollers	200505
16	Elbow spring with rollers (MP5SF)	202545

AMBIDEXTROUS TRIGGER GROUP with SAFETY/SELECTOR LEVER AND TRIGGER MECHANISM

Item#	Parts Description	Part #
17	Axle, ejector	200479
19	Ejector (9mm)	201639
*	Ejector (10mm/.40 S&W)	205128
20	Spring, ejector	200478
21	Distance sleeve (for elbow spring w/rollers/catch)	200504
*	Distance sleeve (MP5SF)	221022
23	Axle, hammer	200494
24	Spring, hammer	201638
25	Axle for trigger & catch	200482
26	Release lever	202054
28	Catch with roller	200871
29	Axle, catch lever	224423
30	Axle, catch lever spring	224424
31	Catch, lever	224425
32	Spring, catch lever	224426
33	Spring, trigger	200483
34	Holder for thread cap, complete (MP5N/KN/PDW/10/40)	205483
	OPTIONAL ITEM	
*	Spare retaining spring for holder for thread cap (#205483)	224650

* Denotes item(s) not pictured in illustration.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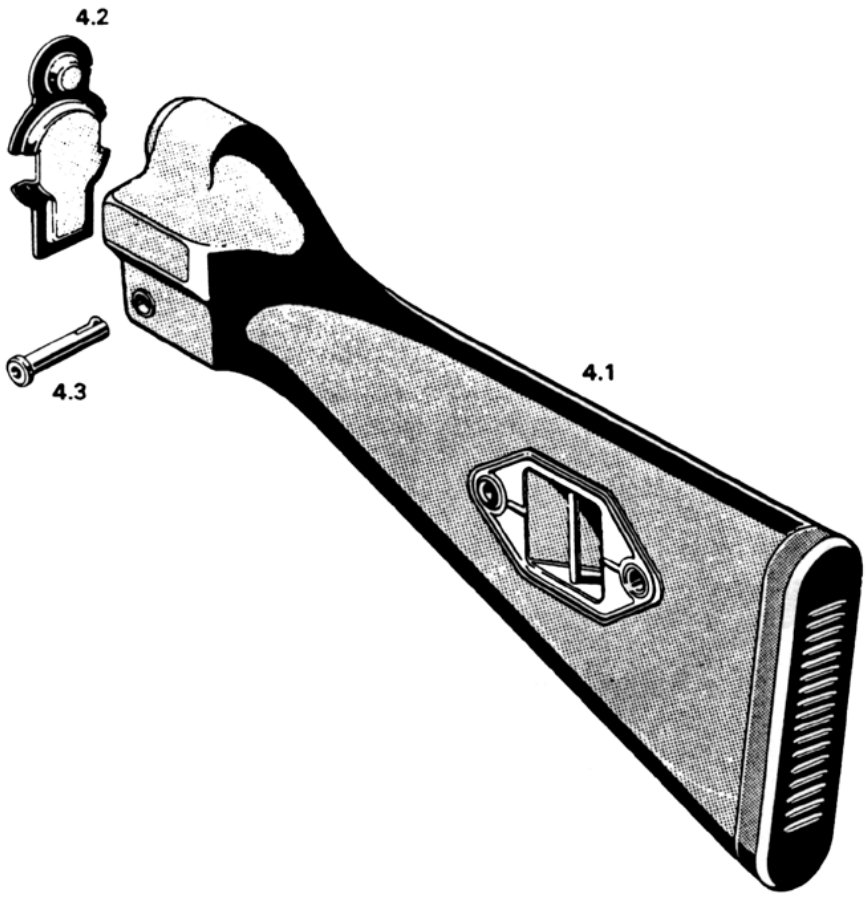
BURST TRIGGER GROUP (2&3 ROUND) w/
SAFETY/SELECTOR LEVER AND TRIGGER MECHANISM
Illustration #5B

Item #	Parts Description	Part #
1	Trigger group, complete, fits (MP5A2/A3/N/SD) (3-round burst)	225002
1	Trigger group, complete, fits (MP5K/KN) (3-round burst)	224818
2	Grip only (MP5A2/A3/N/SD)	225003
2	Grip only (MP5K/KN)	224819
3	Safety/selector lever with axle, (left) 012, 013S	225087
3	Safety/selector lever with axle, (left) 012, 013	225397
4	Safety/selector lever, (right)	225089
5	Trigger mechanism, complete (3-round burst), MP5A2/A3/N/SD/K/KN)	224811
6	Hammer with pressure shank, complete	224813
7	Shifter rod	224429
8	Trigger	224436
9	Sear release latch	224435
10	Elbow spring for sear latch	224434
11	Axle for sear release latch	224433
12	Sear, complete	224439
13	Counting wheel 013, 013S	224441
13	Counting wheel 012, 012S	205295
14	Stop Latch	224445
15	Trigger housing (bare)	224448

BURST TRIGGER GROUP (2&3 ROUND) w/
SAFETY/SELECTOR LEVER AND TRIGGER MECHANISM

Item #	Parts Description	Part #
16	Elbow spring with roller	200505
17	Ejector axle, complete	200479
18	Eccentric bushing	224418
19	Ejector	201639
20	Spring for ejector	200478
21	Distance sleeve for catch	200504
22	Disk	224419
23	Hammer axle	200494
24	Hammer spring	201638
25	Axle for trigger and catch	200482
26	Compression spring for shifter rod	224420
27	Compression spring rod	224421
28	Catch	225107
29	Axle for catch lever	224423
30	Axle for stop latch	224424
31	Catch lever	224425
32	Elbow spring for stop latch	224426
33	Elbow spring for trigger	224480
34	Hammer spring bushing	224996
35	Catch release lever	225111

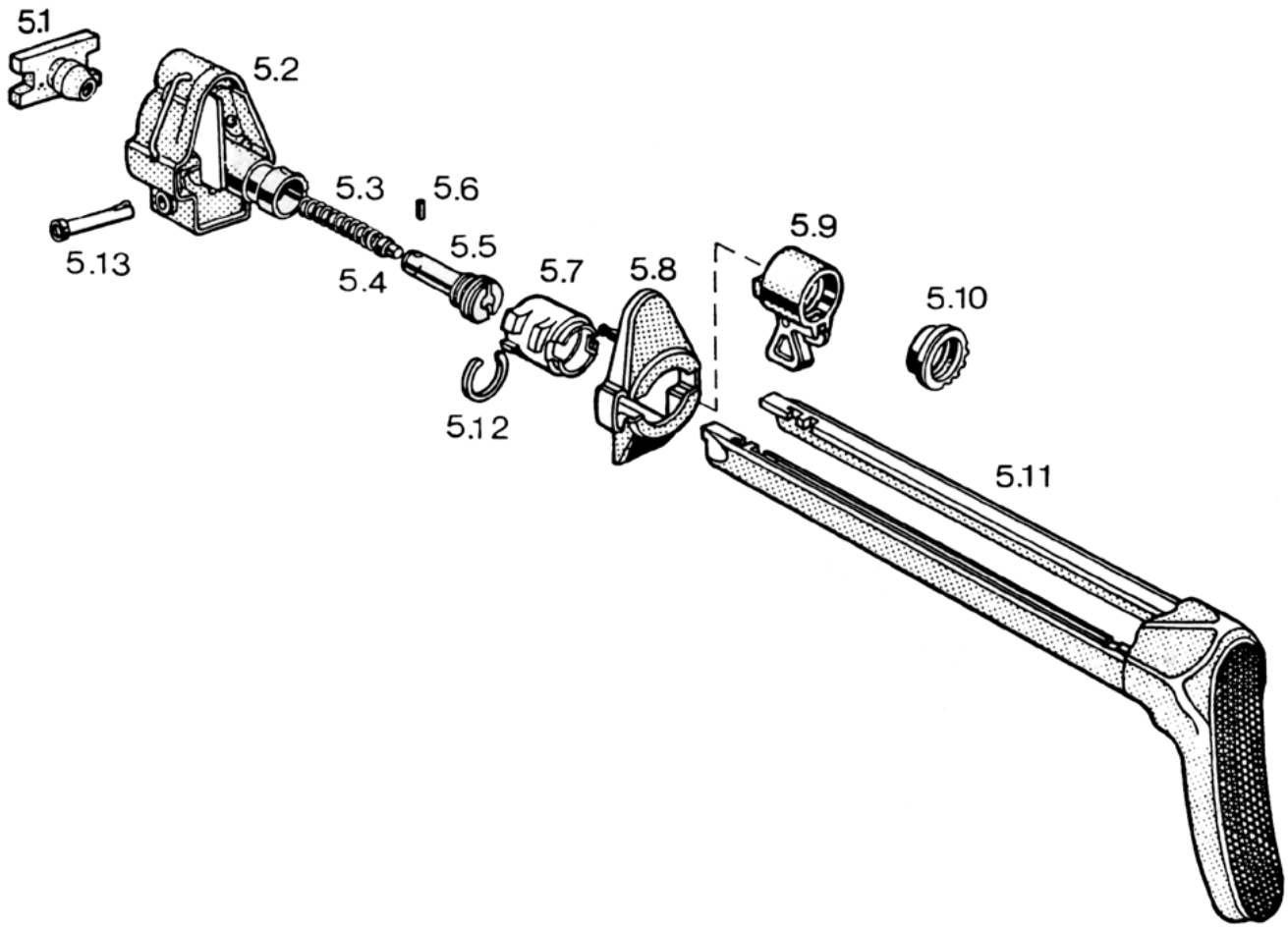
* Denotes item(s) not pictured in illustration.



BUTTSTOCK, FIXED
illustration #6

Item #	Parts Description	Part #
4.1	Buttstock, complete	205586
4.2	Back late (MP5A2/A3/SD)	205590
4.3	Locking pin, complete	200520
	Buttcap, complete (MP5K/KN)	206409
4.4	Buttcap, incomplete, w/o swivel or circlip (MP5K/N) (See compl. #206409)	206416
4.5	Swivel with bushing	205935
4.6	Circlip, 4.0mm	971748

* Denotes item(s) not pictured in illustration



BUTTSTOCK, Retractable
illustration #7

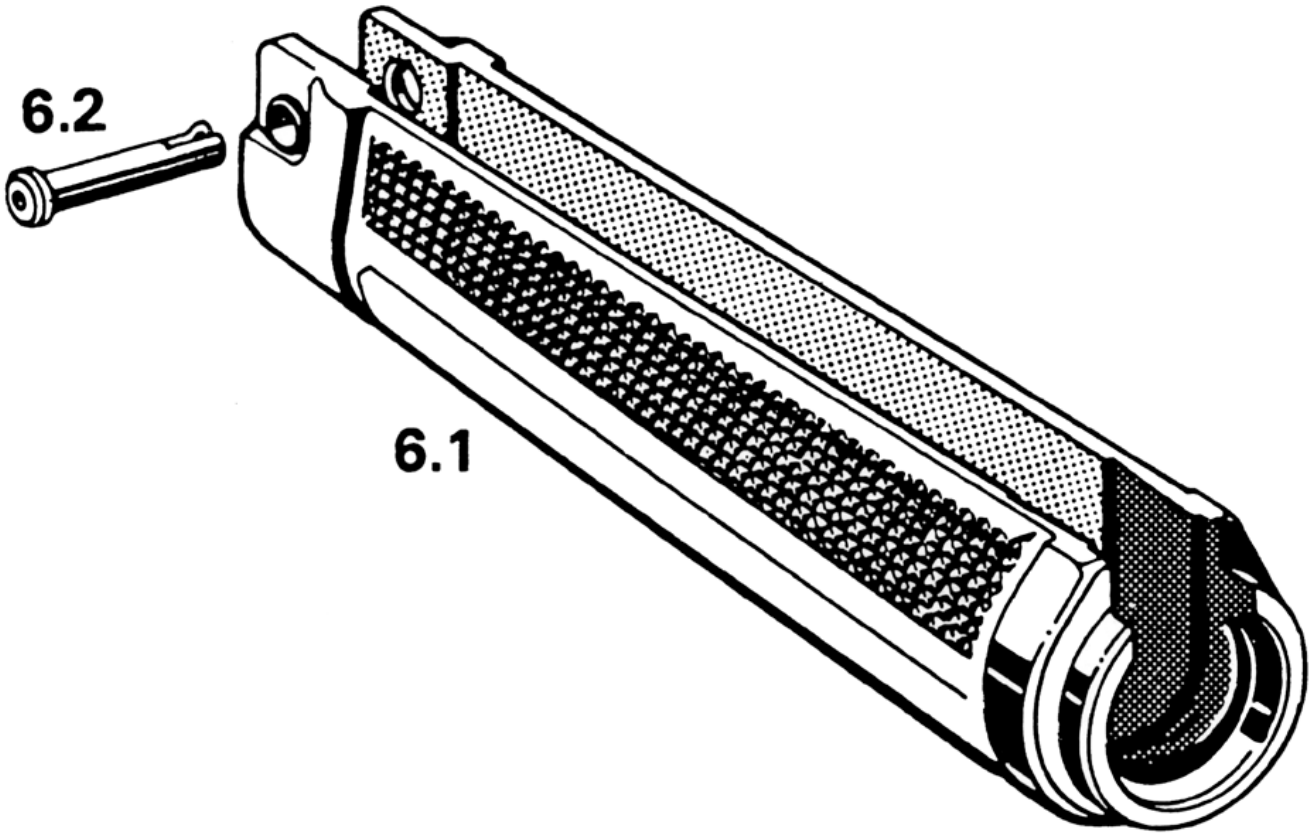
Item #	Parts Description OLD STYLE (Metal Back Plate)	Part#
5.1	Buffer	206689
5.2	Back plate	202038
5.3	Compression spring	200985
5.4	Compression bolt	200981
5.5	Buffer screw	200983
5.6	Clamping sleeve	200959
5.7	Ratchet	200951

BUTTSTOCK, Retractable

Item #	Parts Description	Part#
5.8	Protective cover with plug	205839
5.9	Clamping lever	205838
5.10	Spring ring with catch	200952
5.11	Retractable buttstock, end only (see diagram)	225812
5.12	Circlip	922622
5.13	Locking pin, Complete	200520

NEW STYLE (Plastic Back Plate)

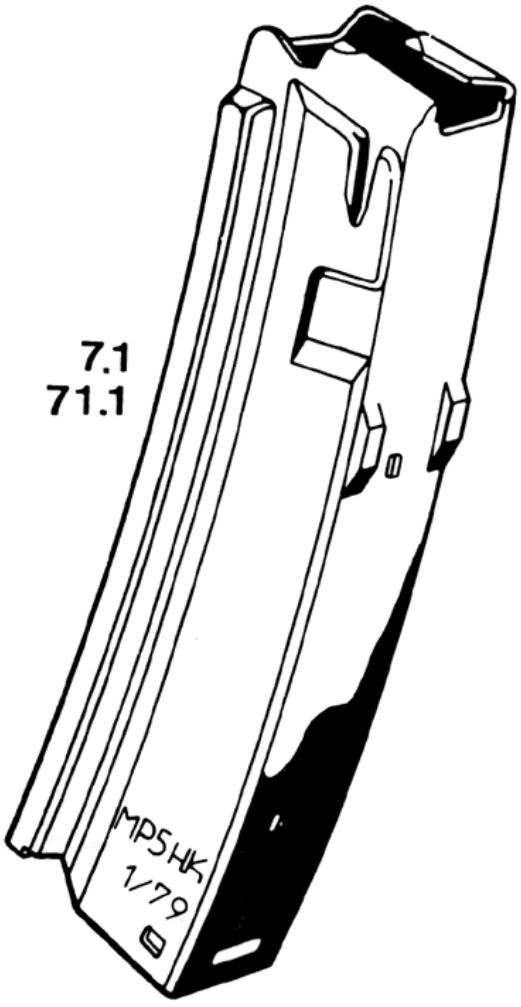
*	Clamping spring	200956
*	Clamping bushing	225562
*	Support	224769
*	Protective cap	225559
5.7	Ratchet	225560
5.9	Clamping lever	225561



HANDGUARD
illustration #8

Item #	Parts Description	Part #
6.1	Forearm, slimline (MP5A2/A3)	224007
6.2	Forearm, wide grip (standard for MP5A2/A3/N/SF/10/40)	206657
*	Handguard (MP5SD)	206472
*	Vertical Fore grip (MP5K/KN/PDW)	206421
6.3	Locking pin, complete	200459

* Denotes item(s) not pictured in illustration.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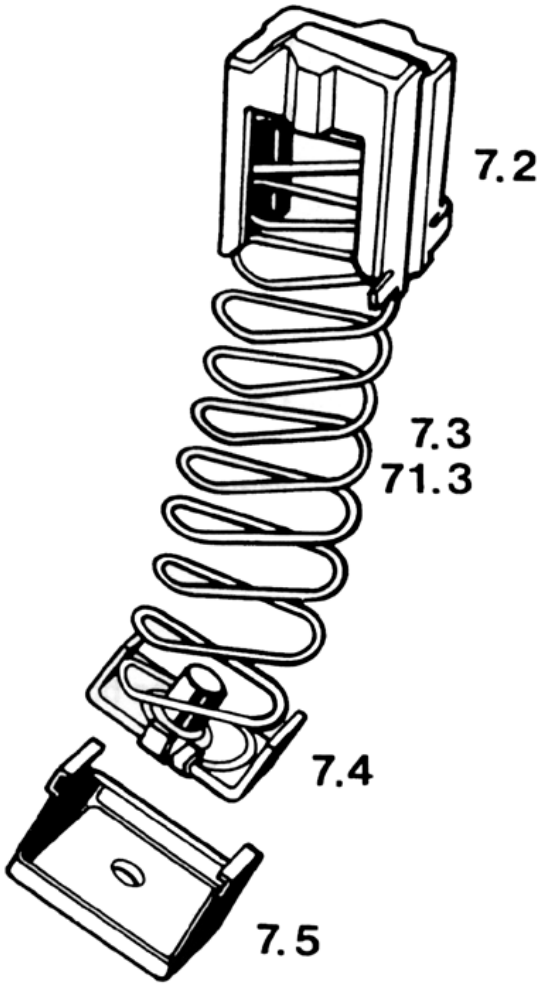
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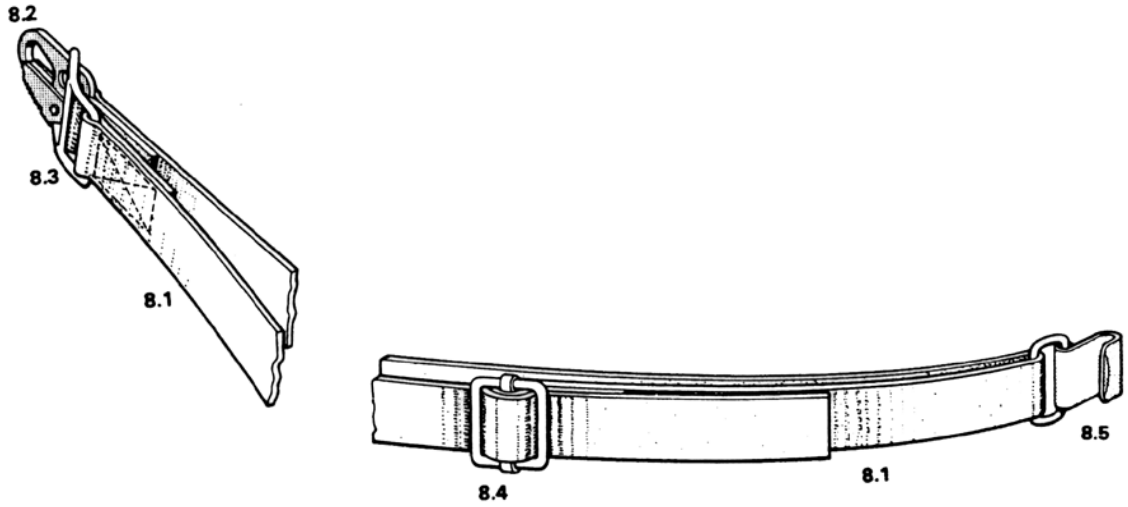
MAGAZINE, Curved
illustration #9

Item #	Parts Description	Part #
7.1	Magazine housing, 30rd. (9mm)	206305
*	Magazine housing, 30rd. (10mm & .40S&W)	205135
7.2	Follower (9mm)	206657
*	Follower (10mm & .40S&W)	205132
7.3	Follower spring 30rd. (9mm)	206657
*	Follower spring 30rd. (10mm & .40S&W)	205133
7.4	Locking plate, complete (9mm)	206680
7.5	Magazine floor plate (9mm)	201654
*	Magazine floor plate (10mm & .40S&W)	205134
71.1	Magazine housing, 15rd. (9mm)	206478
71.3	Follower spring, 15rd. (9mm)	206679

* Denotes item(s) not pictured in illustration.



MULTI-PURPOSE CARRYING SLING
illustration #10

Item #	Parts Description	Part #
8.1	Multi-purpose carrying sling (MP5A2/A3/SD/N/SF) (Includes parts 8.2 to 8.5)	205506
*	Ambidextrous carrying sling (standard on MP5 10/40) (Requires sling pins listed below)	205213
*	Leather carrying sling (includes parts 8.2 to 8.5)	200574
8.2	Carbine hook, complete	200581
8.3	Double eye	205511
8.4	Buckle	201730
8.5	Hook	200217
*	Sling pin, ambidextrous, large for buttstock Complete with locking knob	700148
*	Sling pin, ambidextrous, small for forearm Complete with locking knob	700154
*	Spare locking knob for sling pin (#700148 & 700154)	205119
*	Spare rubber O-ring for sling pin (#700148 & 700154)	982311

* Denotes item(s) not pictured in illustration.

Miscellaneous Items for MP5

Parts Description	Part #
Sound suppressor, aluminum (MP5SD)	928878
Sound suppressor, stainless steel, KAC-Navy (MP5SD/SDN)	701699
Sound suppressor, stainless steel, KAC-Navy (MP5N/KN/PDW and P9SN)	701700
Sound suppressor, stainless steel, KAC-Navy (MP5 10/40)	701600
Seal ring, rubber, for MP5SD	206469
Cleaning brush for barrel parts (MP5SD/SDN)	225376
Holder for thread cap (MP5NB/KN/PDW/10/40)	205483
Spare retaining spring for holder for thread cap (ID #205483)	224650
Tac Guard with locking pin (Fits slimline forearm, ID #224007 only)	700410
Buttcap complete, for MP5K/KN	206409
Tactical forearm with light, model 628, 6-volt for MP5A2/A3/SF/N/10/40&HK53	700594
Tactical forearm with light, model 629, 6-volt with dual pressure switch for MP5A2/A3/SF/N/10/40&HK53	701163
Tactical light for MP5SD/SDN model 6691, 6-volt	701165
Tactical light for MP5K/KN/PDW/SP-89, model 668, 6-volt	701436
A15 offset adapter for use with models 628 & 629 with sound suppressor attached	701435
Battery, 6-volt (for Tactical forearm)	700602
Cleaning kit, basic, 9mm	K701103PI
Cleaning kit, basic, 10mm/.40 S&W	K701109PI
Cleaning kit, SMG Accessory, 9mm (requires one basic kit to be complete)	K701108SMG
Cleaning kit, SMG Accessory, 10mm/.40S&W (requires one basic kit to be complete)	K701109SMG

Miscellaneous Items for MP5

Parts Description	Part #
Dual magazine clamp (9mm)	222144
Dual magazine clamp (10mm & .40 S&W)	214285
Magazine loader (9mm)	206506
Magazine loader and unloader (9mm)	700042
Ambidextrous carrying sling (requires pins #700148 & 700154)	205213
Sling pin, ambidextrous, large for buttstock, compl. w/locking knob	700148
Sling pin, ambidextrous, small for forearm complete with locking knob	700154
Spare locking knob for sling pin (#700148 & 700154)	205119
Spare rubber O-ring for sling pin (#700148 & 700154)	982311
Sight adjustment tool	300009
Blank firing attachment (9mm)	225763
Flash Hider (9mm)	221127
Flash Hider (10mm/.40S&W)	205107
Receiver cap (MP5A2/A3/SD/N/SF)	205933
Folding buttstock (MP5K/KN/PDW)	701212
K-Grip adapter (allows MP5K vertical foregrip #206421 to be fitted to MP5A2/A3/N/SF/10/40)	701173
Scope mounts with 30mm rings and 1” inserts	700039
Rail mount (no rings)	206734
Manual, operators, MP5A2/A3/K/SD	927805
Manual operators, MP5SF	928149
Manual, operators, MP5A4/A5	926316

Miscellaneous Items for MP5

Parts Description	Part #
Manual, operators, MP5N	927810
Manual, 3rd burst trigger group, maintenance and repair	927872
Manual, maintenance and repair (MP5A2/A3/SD/K)	927859
Manual, aiming with HK small arms	926153
Catalog, spare parts (MP5A2/A3/SD/K)	927876
Wall chart, MP5-I (7 groups, color)	927899
Wall chart, MP5-II (Bolt principle, color)	927752
Wall chart, MP5-III (Trigger function, color)	927755
Wall chart MP5-IV (All parts, B&W)	927758
Cut-away weapon, MP5A3 training aid, w/30rd magazine	928849
Cut-away weapon, MP5N training aid, w/30rd. magazine	701314
0,1 Safety lever set (for use in 2 round and 3 round burst ambidextrous trigger group only – limits movement and function to semi-automatic mode only) NOT FOR USE IN “NAVY” TRIGGER GROUPS!	214631
Extended safety/selector lever for all ambidextrous trigger groups (except MSG90)	701405

SPECIAL TOOLS, FIXTURES AND GAUGES

Item #	Parts Description	Part #
1	Feeler gauge, 2 leaves, .10 & .50 mm	300019
*	Feeler gauge, 5 leaves, .10, .35, .40, .45, .50mm	329830
2	Rear sight adjusting tool consisting of 2 parts for Rotary rear sight	300009
3	Cleaning rod, pull through	317713
4	Cleaning rod	313927
5	Chamber cleaning brush	305179
6	Bore scope	954610
7	Go and symmetry gauge (9mm MP5 only)	314035
8	Straightening mandrel for cocking lever housing	300573
9	Straightening mandrel for receiver (9mm MP5 only)	313928
10	Universal spanner	312287
11	Pin punch, 3.5 mm diameter	957942
12	Spring pin retaining tool, 4.2 mm diameter	300767
13	Pin punch, 2.5mm diameter	958214
*	Pin punch, 1.8mm diameter	957310
14	Spring pin retaining tool, 2.8mm diameter	300591
15	Limit gauge for firing pin	322165
16	Extractor protrusion gauge	322161
17	Pin punch, 4mm diameter	958215
18	Assembly fixture	301101
19	Pin punch, 2mm diameter	958213
20	Spring pin retaining tool, 2.5mm diameter	318270

SPECIAL TOOLS, FIXTURES AND GAUGES

Item #	Parts Description	Part #
21	Spring pin retaining tool, 2.2mm diameter	301105
22	Plastic hammer	957422
23	Half round file 150x12x3	952834
24	Spring retaining tool, 4.5mm diameter	318272
25	Disassembly mandrel for extractor spring	918615
*	Go and symmetry gauge for cocking lever housing	300575
*	Straightening mandrel for front sight holder	300016
*	Go gauge for magazine well (9mm MP5 only)	303030
*	Caliber gauge with measuring bar, 8.9mm diameter	305265
*	Straightening mandrel for oversize receiver (3 parts) (9mm MP5 only)	328686

* Denotes item(s) not pictured in illustration.

L **Please refer to the current H&K Law Enforcement/Government Price List for a complete listing of entire weapons, accessories, cleaning material, instructional materials, and related items for the MP5 submachine guns.**

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